



Homeland
Security

June 8, 2007

Office of Infrastructure Protection
Chemical Security Compliance Division
Mail Stop 8100
Department of Homeland Security
Washington, DC 20528-8100

Memorandum for Owners and Operators

SUBJECT: Chemical Security Assessment Tool (CSAT) Top-Screen Assistance

The purpose of this memorandum is to provide users with information regarding the completion of the Top-Screen portion of the CSAT pursuant to the Chemical Facility Anti-Terrorism Standards (CFATS) promulgated by the Department of Homeland Security (DHS). The CFATS are found at 6 CFR part 27. Attached for your review are the questions contained in the CSAT Top-Screen. DHS is making this information available to assist users who wish to assemble the information they might need to complete the Top-Screen before entering the secure web-based CSAT system.

Users should be aware that this document is provided **for information only**. Users should not submit this document to DHS as a completed Top-Screen survey, and DHS will not accept paper submissions of Top-Screen data. Pursuant to 6 CFR §27.200, the CSAT Top-Screen requests information from facilities that may reflect potential consequences of or vulnerabilities to a terrorist attack or incident. This includes information concerning the names, quantities, volumes, and properties about specific chemicals.

Information developed pursuant to the Top-Screen is considered Chemical-terrorism Vulnerability Information (CVI). Accordingly, users must protect the information and any document(s) in accordance with 6 CFR 27.400 and as specified in the CVI Procedures Manual.

Although the questions in the Top-Screen are straightforward, to assemble the appropriate information to complete the Top-Screen, users may wish rely on the expertise and information available from different areas or departments within their facilities or companies, including:

- Process safety experts
- Environmental staff
- Logistics/transportation staff
- Laboratory/research staff
- Marketing/sales staff
- Engineering staff
- Security personnel

For further information, contact the CSAT Helpdesk at (866) 323-2957. The Helpdesk is open Monday-Friday from 7:00 am - 7:00 p.m. (EST). We hope you find this information helpful.

A handwritten signature in black ink, reading "Robert B. Stephan". The signature is fluid and cursive, with a long horizontal stroke at the end.

Robert B. Stephan
Assistant Secretary
Infrastructure Protection



U.S. Department of Homeland Security

CSAT Top-Screen

Users Manual



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Introduction

On October 4, 2006, President George Bush signed the Department of Homeland Security (DHS) Appropriations Act of 2007 (the Act) which provides DHS with the authority to regulate the security of high-risk chemical facilities (see Pub L. 109-295, sec 550). The Chemical Facility Anti-Terrorism Standards (6 CFR Part 27) Interim Final Rule (IFR) was published on April 9, 2007, to implement the Act.

The intent of 6 CFR Part 27 is to enhance the security at high-risk chemical facilities to protect against terrorist attacks. A facility will be considered to present high levels of security risk if, in the discretion of the Secretary of Homeland Security, it presents a high risk of significant adverse consequences for human life or health, national security and/or critical economic assets if subjected to terrorist attack, compromise, infiltration, or exploitation.

6 CFR Part 27 requires chemical facilities fitting certain risk profiles to register with DHS after which they will be given access to the DHS Chemical Security Assessment Tool (CSAT). CSAT is a secure, web-based system that includes User Registration, the Top-Screen questionnaire, Security Vulnerability Assessment (SVA) tool, and a Site Security Plan (SSP) template. Facilities that register with DHS will complete the Top-Screen to determine if they are exempt from the regulation and, if not exempt, they will complete this consequence-based assessment. Upon completing the Top-Screen a facility will be evaluated to determine if it presents a high level of security risk. The Department will notify the facility in writing of its initial determination. If the Department's preliminary determination is that the facility is not a high risk facility the department will send a letter stating its determination. See Attachment B for an example of such a letter. If the Department's preliminary determination is that the facility is a high risk facility the department will also notify the facility's of its placement in a risk-based tier pursuant to §27.220(a). See Attachment C for an example of such a letter. The facility will then be required to complete an SVA. The purpose of the SVA is to identify the critical onsite assets (based on the security concerns identified in the Top-Screen), evaluate the vulnerabilities of these critical assets against a defined set of potential attack scenarios, re-evaluate the potential consequence on an asset basis, and determine a final facility tier level. Following communication of the final facility tier, the facility will complete a SSP detailing the security measures to protect the identified critical assets, and meet the intent of the Risk-Based Performance Standards, as outlined in 6 CFR Part 27.

This Users' Manual applies only to the CSAT Top-Screen.

The Top-Screen follows a logical data collection progression: first, collecting basic facility identification information and then asking a series of questions regarding which chemicals are manufactured, processed, used, stored or distributed at the subject facility, followed by a request for additional supplemental information for any listed chemicals found onsite. Questions cover the following security concerns:



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- toxic, flammable, and explosive chemicals with the potential for offsite impacts;
- sabotage/contamination chemicals;
- chemicals that could be used to develop improvised explosive devices (IED);
- Weapons of Mass Effect (WMEs) chemicals;
- chemical weapons and chemical weapon precursor chemicals (CW/CW Precursors);
- chemicals that are considered economically critical because of their importance to the economy (called economically critical chemicals);
- chemicals that are considered critical to the ability of the government to conduct its mission in an emergency (called mission critical chemicals).

The Top-Screen questions focus on the following types of facilities:

1. Chemical manufacturing, storage, use and distribution;
2. Petroleum refining;
3. Liquefied natural gas storage (e.g., peak shaving facilities).

Upon completion of the Top-Screen, a screen informing the user that the facility “may be regulated” or “not regulated” will appear. If the “not regulated” screen appears a confirmation letter will be sent to the facility or the Submitter. If the “may be regulated” screen appears, The Department will notify the facility in writing of its initial determination after evaluating the Top Screen submission. If the Department’s determination is that the facility is not a high risk facility the department will send a letter stating its determination. See Attachment B for an example of such a letter. If the Department’s determination is that the facility is a high risk facility the department will also notify the facility’s of (1) its placement in a risk-based tier pursuant to §27.220(a) and (2) the specific chemicals by security issue that need to be addressed in the Security Vulnerability Analysis. See Attachment C for an example of such a letter.

1.0 Getting Started - Organization of this User’s Manual

This Users’ Manual is generally organized in the same order as the questions and sections appear in the Top-Screen itself.

- Section 1 covers what users need to do to get ready to fill out the screen (assembling information, consulting with others onsite) and becoming familiar with how the screen functions.
- Section 2 covers General Facility Information that must be entered by all users.
- Section 3 covers questions specific only to Petroleum Refineries. Facilities that are not petroleum refineries may skip this section.
- Section 4 covers questions specific only to LNG Storage Facilities. Facilities that are not LNG Storage Facilities may skip this section.



- Section 5 covers questions that relate to chemical manufacturing, process, use, storage or distribution. All users will fill out this section of the screen including those that answered questions relevant to petroleum refineries and LNG storage facilities. Section 5 also covers the information helpful to entering data related to the mission critical and economically critical chemicals.
- Section 6 discusses validating, reviewing and submitting the data to DHS.
- Attachment A contains worksheets and examples for calculating and reporting Total Onsite Quantity and the amount in the Area of Highest Quantity.
- Attachments B and C are example letters that a Submitter may receive from DHS after completion of the Top-Screen.

For easy identification of questions, the question number appears in brackets in the text of the Users' Manual as well as in Top-Screen. For example, [Q:1.0-66] appears next to the question requesting the Facility Name. This question number will help users identify clearly which question in the online tool is associated with which explanation in the Users' Manual. The question number will also be helpful if a user contacts the HelpDesk.

1.1 CVI Authorizing Statements/Sign-in Screen

Once a facility is registered with DHS, the user will have access to the CSAT Top-Screen. A company may register for the CSAT system by going to the user registration website and filling out a User Registration form at www.dhs.gov/chemicalsecurity.

Top-Screen User Roles are discussed below in more detail in Section 1.3. Access to the CSAT SVA and SSP will be provided only to those facilities found to be covered by 6 CFR Part 27.

Once a user has entered Top-Screen, information regarding Chemical-terrorism Vulnerability Information (CVI) will be displayed. The user is required to read the CVI Authorizing Statements regarding the information in Top-Screen, how to protect it and to whom and under what circumstances such information may be disclosed. The user must affirm that the information is understood and that the user agrees to abide by the requirements by clicking each box as well as the Accept button at the end of the statement. The user will be asked to read and accept the conditions on the authorizing statement the first time that user enters the system. If the user does not wish to abide by the requirements and is not willing to accept the conditions, the user will not be able to enter the Top-Screen. All CSAT users will be presented with this information the first time they enter the screen only.

Users should note that Top-Screen is CVI when an answer (data) is associated with a Top-Screen question. For more details regarding protection of information, please refer to the CVI manual which is available at www.dhs.gov/chemicalsecurity.



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Chemical Security Assessment Tool (CSAT)

Chemical-terror Vulnerability Information (CVI)

CVI Authorizing Statements

Please read the following information and check the boxes to indicate that you understand and accept these requirements.

- ☐ I understand that I will have access to Chemical-terrorism Vulnerability Information (CVI). In accordance with the Public Law 109-295, Section 550 and 6 CFR 27.400. This information is exempt from release under Freedom of Information Act (5 U.S.C. 552), and State and local disclosure laws. No part of this record may be disclosed to persons without a "need to know," as defined in 6 CFR 27.400(e), except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action. Public disclosure is governed by 6 CFR 27.400(g).
- ☐ As a chemical facility representative I acknowledge that I may only share CVI with board members, employees, or contractors of this company. I agree to only share CVI with these eligible individuals that have completed the requirements to become an authorized user of CVI.
- ☐ I have read and agree to abide by the following CVI safeguarding requirements.

Storage: When not in your possession, store in a secure environment such as in a locked desk drawer or locked container. **Do not leave this document unattended.**

Once a user has completed the CVI Authorization, the sign in screen that appears will list each facility registered with DHS and the status of the questionnaire for each facility for which the individual user has access. Click the box next to the desired survey and click **Continue** to enter the Top-Screen.

Chemical Security Assessment Tool (CSAT)

Chemical-terror Vulnerability Information (CVI)

Choose a survey to edit or review.

Status	Questionnaire Start Date	Questionnaire End Date	Questionnaire
New			CSAT Top Screen v1 for XYZ Chemical Corporation Add Reviewer

At this point, a **Reviewer** with read-only privileges may be added to each facility. An existing CSAT User or a new CSAT User may be added by selecting the appropriate button and entering the requested information.

This process will grant read-only access to this survey to the individual specified as a Reviewer by one of the following methods:

Existing User

Choose this option if the person to whom you wish to grant Reviewer access to already has a CSAT account. This method will automatically give the specified Reviewer access to this survey.

Grant Access to Existing CSAT User

New User

Choose this option if the person to whom you wish to grant Reviewer access to does not have a CSAT account. This method will generate a CSAT user account for this person and email the username and password to him/her.

Grant Access to New CSAT User



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1.2 Navigating within the Tool

Navigation within the Top-Screen tool is simple. A user can navigate to the next and previous screens by using the *Next* and *Back* buttons on the screen.



Using the *Next* and *Back* buttons will automatically save the information that was entered on the page.

Warning: Do not use the *Next* and *Back* buttons (or arrows) on your browser. Using the browser's navigation buttons can result in lost data.

Users can also navigate through the Top-Screen by clicking on the area of the screen that appears in the menu along the left side of the screen. This menu will not be displayed until after the information in the **General** section of the Top-Screen has been entered.





On some screens, additional text will need to be added. When more than one text field is needed, use the **Add** button to add a row. The **Delete** button can be used to delete a row or an entry.

The user's session will "time out" after 120 minutes (2 hours) if the system is not in use. Users will need to log back in to restart the session. Data that has been entered will not be lost and users will be directed back to where they were in the screen when the session "timed out."

1.3 CSAT User Access Roles

The following roles are defined in CSAT:

- The Preparer is authorized to enter the data into the CSAT system, but not submit the data to DHS (Department of Homeland Security). This person is a qualified individual familiar with the facility in question.
- The Submitter is designated by the company to submit the information collected in the CSAT system to DHS.
- The Authorizer is the individual that provides assurance to DHS that the submitter and preparer are authorized to complete the CSAT information.
- The Reviewer, which is an optional role, is allowed to review information but not enter, edit or submit the information. This is a read-only role.

The Preparer, Submitter, and Authorizer can be the same person or unique individuals. Each facility can have unique Preparers, Submitters, Authorizers or Reviewers. All - or a subset of - facilities within the same organization can share these roles.

When the Preparer sends the Top-Screen to the Submitter for review, the Preparer will no longer be able to access the information unless it is resent to the Preparer by the Submitter for revision. When the Submitter has access to the Top-Screen, the information may be revised by the Submitter. Once the Submitter transmits the information to DHS, it is no longer available to the user. If the Top-Screen submitted by a facility is rejected by DHS for any reason, or the facility needs to repeat the screening process, all of the information must be re-entered. The facility is required to retain a copy of the completed Top-Screen. This record is considered CVI and must be protected in accordance to 6 CFR 27.255(b).

1.4 Saving the Data

All data input in the Top-Screen is saved automatically when the user clicks the **Next** or **Back** button. If a user clicks the back or forward arrows on the browser, information may be lost. Users can exit the program and return multiple times. Data that has been entered into Top-Screen will have been saved.



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Warning: Only use the *Next* and *Back* buttons in the Top-Screen tool for navigation. This will help avoid losing data that has been entered.

1.5 Validating your Data

If data input fields are skipped or completed incorrectly, a validation error message will be displayed. The system allows the user to return to the error and correct it. For example, if the name of the Operator for the facility is not entered, the following error report will be displayed. The link will direct the user to the input area for correction.

WARNING: This record contains Chemical-terrorism Vulnerability Information that is controlled under 6 CFR 27.400. No part of this record may be disclosed to persons without a "need to know," as defined in 6 CFR 27.400(e), except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action.

 Homeland Security	Chemical Security Assessment Tool (CSAT) Top Screen	
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General

Error!

- Who is the Operator of the facility? is missing.

[Go to this page to fix these issues](#)

Validation is done for logical and basic errors only. The validation function cannot be relied upon to catch all or many different errors. The Submitter is wholly responsible for submitting accurate and correct information to the best of his knowledge.

After General facility data is entered, the menu shown below will appear on the left-hand side of the screen. Clicking **Validate Report** will allow the user to verify and correct errors at any time.



Homeland Security	
General	
Release of Toxics	
Release of Flammables	
Release of Explosives	
Theft/Diversion of IEDP	
Theft/Diversion of WME	
Theft/Diversion of CW/CWP	
Sabotage/Contamination Chemicals	
Mission Critical Chemicals	
Economically Critical Chemicals	
View Summary Report	
Validate Report	
Logout	

1.6 Preparing to Complete Top-Screen-Information and Individuals

Prior to completing Top-Screen questions, it is recommended that a facility collect and verify the following **information**. Verifying the accuracy and completeness of the data prior to starting the Top-Screen will allow for quicker completion. The information that should be collected includes:

- A copy of 6 CFR Part 27 Interim available at www.dhs.gov/chemicalsecurity.
- A copy of the 2007 DHS Chemicals of Interest with Screening Threshold Quantities (Appendix A to 6 CFR Part 27) available at www.dhs.gov/chemicalsecurity.
- A copy of the downloadable PDF file with Top-Screen questions that may be used as a worksheet available at www.dhs.gov/chemicalsecurity.
- A copy of the CVI manual regarding protection of information available at www.dhs.gov/chemicalsecurity.
- Facility information:
 - NAICS codes



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- o Data Universal Numbering System (DUNS) numbers available at www.dnb.com
 - o latitude and longitude from the center of the facility
 - o Parent Company name(s) and DUNS number(s)
 - o Joint Venture names and DUNS number
 - o host/tenant facility names
 - o EPA RMP identifier numbers for the facility and host/tenant facilities (if applicable)
 - o number of employees and full-time resident contractors.
- Chemical inventory information. Name and quantities of all chemicals on Appendix A that are manufactured, processed, used, stored or distributed on the site. Location of Area of Highest Quantity (a 170-foot radius around the area where the greatest amount of the chemical of concern is located).
- Environmental Protection Agency (EPA) Risk Management Plan (RMP) submittal, specifically the most recent RMP submission, EPA Identifier number, covered processes, inventories of chemicals, and offsite consequence analyses. This information will be helpful in answering some of the questions related to toxic release.
- A copy of RMP*Comp¹ to calculate information about toxic releases. This resource may be needed for information related to toxic release chemicals regardless of whether the facility itself is subject to EPA RMP regulation.
- Records used to prepare annual Tier 2 report under the Emergency Planning and Community Right-to-Know Act (EPCRA). These records will include chemical inventory and storage locations for various chemicals onsite.
- Financial, sales and marketing information that will be helpful in reporting production values, market share, capacity utilization rates and product applications. Information from census forms called the *Annual Survey of Manufactures* and the *Survey of Plant Capacity Utilization* if the company or facility has been asked to complete such information.

The following **individuals** might be able to provide information and assistance in the preparation and submittal of Top-Screen:

- Process safety personnel – they know about RMP inventories and documents.
- Environmental personnel – they have a broader idea of site inventories of chemicals because they are responsible for compiling the Tier 2 reports annually.

¹ RMP*Comp is an electronic tool used to perform the off-site consequence analysis required under the Risk Management Program rule. You can download an electronic copy from the RMP*Comp web page. <http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/rmp-comp.htm>.



- Logistics/transportation personnel – they know who the customers are and the uses of the products that the site sells.
- Laboratory/research personnel – can also help on chemical inventories as many of the CWP's and WMEs are usually found in the laboratory because of the small container sizes.
- Marketing/sales personnel – they usually know who the customers are and the uses of site products and also can help with questions related to site capacities (e.g., refinery throughput).
- Engineering personnel – they should be able to help with questions related to replacement costs because they run the projects. Also, they can often help with capacities and throughputs.
- Security personnel – they should know about all security issues at the facility

1.7 Getting Additional Help

More details on 6 CFR Part 27, a set of FAQs related to Top-Screen and other information is available on the DHS website at www.dhs.gov/chemicalsecurity. The CSAT Helpline can be reached at 866-323-2957 from 7:00 a.m. – 7:00 p.m. (Eastern Time), Monday through Friday.

2.0 General Facility Information

All facilities filling out the Top-Screen are required to fill out the information requested on the General Screens. Information that does not exist for a facility or is not applicable should be left blank. The facility type [Q:1.1-65] will determine which sections of the screens are required. Facilities that are Petroleum Refineries and LNG Storage Facilities will fill out sections specific to their operations. They will then fill out the sections of the screen related to chemical manufacturing, processing, use, storage and distribution as well. All facilities will be presented with chemical lists to review and evaluate.

2.1 Facility Name

Facility Name. [Q:1.0-66] Provide the name of the facility. The name must be specific to the site. If the site is part of a large corporation, the name should be the corporate name plus the location (for example, “ABC Oil Refining-Hightown Plant”).

Alternate Facility Name. [Q:1.0-62] Provide any alternative name(s) by which the facility may be known. If the facility has no alternate name, leave this field blank.

2.2 Facility Description

Facility NAICS. [Q:1.1-63] Provide the five- or six-digit North American Industrial Classification System (NAICS) code that corresponds most closely to the primary activity of this facility as a whole. The first three digits of the five- or six-digit code define a major business sector (e.g., 325 represents chemical manufacturing) and the last



two or three digits indicate an establishment's specialty within the major sector (e.g., 325131 represents Inorganic Dye and Pigment Manufacturing). NAICS codes are maintained by the U.S. Census Bureau and may be found on the U.S. Census Bureau website at: <http://www.census.gov/epcd/naics02/>.

Facility DUNS number. [Q:1.1-64] Provide the nine-digit Data Universal Numbering System (DUNS) number. The DUNS number is a unique identifier that allows facility information to be cross-referenced with other business information. If the facility has a DUNS number, it should be available from the financial officer or corporate headquarters. It can also be located through Dun and Bradstreet at www.dnb.com.

Facility Type. [Q:1.1-65] From the drop-down box, choose the facility type that best describes the facility. For example, if the facility uses anhydrous ammonia for refrigeration, choose Chemical manufacturing, usage, storage and distribution. If the facility is a peak shaving facility, choose LNG storage. The options for Facility Type include:

- Refinery;
- LNG Storage Facility (i.e., peak shaving facility);
- Chemical manufacturing, use, storage, distribution (i.e., any public or private facility that manufactures, processes, uses, stores, or distributes chemicals. This type of facility can range from a large petrochemical facility, to a facility that uses anhydrous ammonia for refrigeration, to a facility that stores chemicals for shipping and distribution).

In this Users' Manual, guidance for refinery questions is presented in section 3.0, guidance for LNG Storage Facility questions is presented in section 4.0, and guidance for questions about chemical manufacturing, processing, use, storage and distribution is presented in section 5.0. Guidance for questions relating to mission-critical and economically-critical chemical production is in sections 5.8 and 5.9, respectively.

2.3 Facility Location

Facility Location Address. [Q:1.1-68 to Q:1.1-73] Enter the facility's address for its physical location including the street, city, state and Zip code (including the 4-digit extension, if applicable). This address may not be the same as the facility's mailing address. Use local street and road designations, not post office or rural box numbers. Users should report the same location address as was reported on the User Registration form. Using the same information will enable DHS to match the User Registration information with the Top-Screen submittal more easily.

Facility Latitude and Longitude. [Q:1.1-591 and Q:1.1-75] Enter the latitude and longitude of the geographical center of the facility in decimal units with 6 significant digits after the decimal point (for example, 12.345678). In the United States, latitude is expressed as a positive number; longitude as a negative number. Enter latitude with no



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sign before it and longitude with a negative sign with no space before the coordinate (for example, -98.765432). Enter only numeric data.

There are several publicly available tools to help find the latitude and longitude of the facility. These include publicly available mapping and aerial photography tools (e.g., Google Earth) as well as EPA's Facility Siting Tool Access this tool at: http://www.epa.gov/tri/report/siting_tool/index.htm.

To find the geographic center of a facility, use an online map or aerial photography tool and select the geographic center as the point of reference for the longitude and latitude.

Facility County(ies). [Q:1.1-76] Enter the name of the county or equivalent jurisdiction (e.g., borough, parish) in which the facility is located. If the facility is located in more than one jurisdiction (it crosses county lines, for example), enter all appropriate names.

2.4 Facility Owner or Operator

Owner Name. [Q:1.2-78] Enter the name of the owner of the facility. An Owner is the person or entity that owns a facility. This may be a person, company, cooperative, state, municipality, etc. This may not be the same as the name entered for the facility operator. If the Owner of the facility is a public entity or municipality, continue to enter information as a facility.

Operator Name. [Q1.2-594] An Operator is the person or entity that has responsibility for the daily operations of a facility. This may be a person, company, cooperative, state, municipality, etc. This may not be the same as the name entered for the facility owner. If the Owner and Operator are the same, enter the same information in both data fields.

2.5 Facility Regulatory Mandates/Statutory Exclusions

This section relates to statutory exclusions from 6 CFR Part 27. The exclusion questions minimize the burden of excluded facilities by allowing users who answer *Yes* to the appropriate questions to exit the screen immediately.

Answer *Yes* or *No* to the following questions.

MTSA-covered facilities. [Q:1.3-85] Is the facility regulated pursuant to the Maritime Transportation Security Act of 2002, Public Law 107-295, as amended? If so, answer *Yes* and follow the instructions to complete the screen. For facilities with a portion of the facility regulated pursuant to MTSA and a portion not regulated pursuant to MTSA, select *Partially* and continue to fill out the screen for the portion of the facility not exempted. See the preamble to 6 CFR Part 27 for further information about facilities that may be covered under MTSA. For facilities not regulated pursuant to MTSA, select *No* and continue to fill out the Top-Screen.



What is MTSA?

The Maritime Transportation Security Act (MTSA) was passed by Congress in 2002 to address intentional marine transportation incidents and represents the U.S. implementation of the International Ship and Port Security (ISPS) Code. Interim final regulations pursuant to this law were adopted by the U.S. Coast Guard in July 2003 to implement this law. These regulations are published in 33 CFR 105 for fixed facilities. Many chemical and processing facilities that have ship, barge, or pipeline operations along navigable waterways are covered by these regulations which require, among other things, an SVA and a Facility Security Plan (FSP). A facility that only has property along the waterfront of a navigable waterway, but no operations along the waterway will probably not be covered the MTSA regulations. However, if there is some question regarding coverage, the U.S. Coast Guard Captain of The Port (COTP) should be consulted. These regulations also contain requirements for performance-based security measures at each maritime alert level. Click here for more information on MTSA: <http://www.uscg.mil/HQ/G-M/MP/mtsa.shtml>.

Public Water System. [Q:1.3-86] If the facility is a Public Water System as defined by Section 1401 of the Safe Drinking Water Act, Pub. L. 93-523, as amended, click *Yes*. If the facility contains a unit that is a Public Water System regulated under the Safe Drinking Water Act, but also contains components that are not so regulated, click *Partially* and continue to fill out the screen for the portion of the facility not exempted. For more information on the Safe Drinking Water Act, see <http://www.epa.gov/safewater/sdwa/>.²

If the facility is a **Treatment Works** [Q:1.3-87] as defined in section 212 of the Federal Water Pollution Control Act, Pub. L. 92-500, as amended, click *Yes*. If the facility contains Treatment Works regulated under the Federal Water Pollution Control Act, but also contains a facility or portion a facility that is not so regulated, click *Partially* and continue to fill out the screen for the portion of the facility not exempted. For the definition of Treatment Works in Section 212, see http://www.epa.gov/region5/water/pdf/ecwa_t2.pdf. For more information on the Federal Water Pollution Control Act (commonly known as the Clean Water Act), see <http://www.epa.gov/region5/water/cwa.htm>.

Department of Defense Owned Facility. [Q:1.3-88] If the facility is owned or operated by the U.S. Department of Defense, select *Yes*. Examples of facilities owned and operated by the Department of Defense include military bases.

² A public water system (PWS) is a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals.



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Department of Energy. [Q:1.3-89] If the facility is owned or operated by the Department of Energy, select *Yes*.

Nuclear Regulatory Commission. [Q1.3-90] If the facility is one where NRC already imposes significant security requirements and regulates the safety and security of most of the facility, not just a few radioactive sources, click *Yes*. A facility that only possesses small radioactive sources for chemical process control equipment, gauges, and dials will not be exempt.

If the facility is entirely subject to one or more of the facility mandates/statutory exclusions listed above, the following screen will appear:

Chemical Security Assessment Tool (CSAT)
Top Screen

Chemical-terrorism
Vulnerability Information (CVI)

General

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Survey Completion

You are not regulated.

Based on the information supplied, the XXXXXXXXXX is not covered by the Department of Homeland Security under Section 550 of the Homeland Security Appropriations Act of 2007. You will be mailed a letter that will confirm this in writing. In the event there are significant changes to your facility makeup or activities that may change your designation you are required to again complete the Top Screen to determine if you are a covered facility.

Press the "Next" button to complete your survey and transfer your answers to DHS.

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Click *Next* and follow the instructions to complete the screen. See section 6.0 below for instructions on reviewing, validating, printing and submitting Top-Screen.

If the facility is not exempt, or is partially exempt, continue to fill out the screen.

2.6 EPA Status under EPA's RMP Regulations

Does the facility operate any **U.S. Environmental Protection Agency Risk Management Plan (EPA RMP) covered process(es)** – Program 1, 2, or 3? Click *Yes* or *No*. [Q:1.41-395]

Program 1, 2 and 3 processes are those defined by the RMP Rule and denote the relative level of risk associated with the process (and hence the facility/site), and also establish the regulatory requirements with which the site/company must comply.



Program 3 processes are those with the highest risks as defined by their NAICS code or coverage under OSHA Process Safety Management regulations. The full requirements of the RMP Rule are required of sites with Program 3 processes.

Program 2 processes are those that are primarily storage/transfer operations and have higher risk than Program 1 processes, but less than Program 3 processes. An abbreviated set of RMP Rule requirements compared to the Program 3 requirements are established for Program 2 processes.

Program 1 processes are those that can prove that releases of RMP-covered materials will not have offsite consequences. The remainder of the requirements in the RMP Rule is not required for that process.

For more information on EPA RMP, see 40 CFR 68.10(b), (c), and (d), or Chapter 2 of EPA's General Guidance for Risk Management Programs (40 CFR 68). Go to EPA's RMP web pages for more information:

<http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/index.html>.

2.7 EPA Facility Identifier

If the facility operates EPA RMP covered processes, fill in the unique 12-digit number assigned to the facility by the RMP Reporting Center. [Q:1.42-396] The RMP Report Center included this number in the acknowledgement letter to the facility. If the facility does not operate an EPA RMP covered process, leave this field blank.

2.8 Co-located host/tenant facility

Choose the appropriate description regarding the facility's relationship to other businesses on its property (has a tenant onsite; is a tenant on another company's property, or is the sole tenant on its own property). [Q:1.43-397] A facility that is co-located shares a common perimeter with another company's facility through either a host or a tenant agreement. If a facility does not share a site with another company's facility it is the sole tenant.

If the facility hosts an unrelated tenant onsite or is an unrelated tenant, enter the name of the host or tenant facility [Q:1.44-398] and its EPA RMP Identifier [Q:1.44-399], if applicable. Add additional rows, if necessary. If the facility is a sole tenant on its property, leave this field blank.

2.9 Additional Facility Information

Number of full-time employees. [Q:1.45-400] Enter the typical maximum number of employees, plus the number of full-time (or resident) contractors onsite at any given time including shift changes. Do not include occasional times of a higher onsite workforce, such as turnarounds or construction, in this number.



Parent Company Name (s) [Q:1.45-432] and **DUNS number(s)** [Q:1.45-435]. Enter the names and DUNS numbers of the corporations or other business entities that own greater than 50% of the voting stock of the company. If the facility is owned by a joint venture, enter the name and DUNS number of the first of the two major owners. If the facility does not have a parent company or is not a joint venture, leave these fields blank.

2.10 Security Vulnerability Assessment

Has a Security Vulnerability Assessment (SVA) been conducted? [Q:1.47-436] Click *Yes* or *No*.

A Security Vulnerability Assessment (SVA) enables the identification of security hazards, threats, and the evaluation of security countermeasures and vulnerabilities.

If *Yes*, select the applicable SVA methodology from the drop-down menu on the following screen.

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Security Vulnerability Assessment (SVA) methodology

Select the methodology used for the most recent security vulnerability assessment.

[Q:1.48-438]

CCPS (Center for Chemical Process Safety)
CCPS-Equivalent
Sandia VAM
Other

If a CCPS Equivalent method was used, choose the name of the method from the drop-down menu on the following screen. [Q:1.48-438]

A Center for Chemical Process Safety (CCPS) Certified Equivalent Security Vulnerability Assessment (SVA) is one that has been reviewed and formally approved as meeting the requirements of CCPS' *Guidelines for Analyzing and Managing the Security Vulnerabilities of Fixed Chemical Sites*. See the downloadable guidance for a list of such methodologies or search under “Resources & Links” on the CCPS website accessible here:
<http://www.aiche.org/CCPS/index.aspx>.

If the facility has conducted an SVA using another methodology, choose “*Other*” and provide the name of the SVA methodology.

For facilities that have conducted an SVA previously, enter the **date** that the most recent SVA was completed at the facility. [Q:1.483-654] Use the following date format mm/dd/yyyy (e.g. May 1, 2006 is entered at 05/01/2006).



3.0 Petroleum Refineries

The following refinery-specific questions will be required if the facility was described as a Refinery in Question 1.1-65. If the facility was not described as a Refinery, the system will skip this section. After completion of the Petroleum Refinery specific questions, a series of standard questions about chemicals that may be onsite at or above the Screening Threshold Quantity will be required.

The following section relates only to the questions directed to facilities that chose “Refinery” as the best description of the facility. If the facility is not a refinery, do not complete this section. Please refer to section 5.0 for chemicals onsite and sections 5.8 and 5.9 for questions related to economic criticality and mission critical questions.

3.1 Refinery Capacity

Typical Operating Capacity. [Q:1.5-386] Enter the typical operating capacity of the refinery in barrels per day (bpd). Do not use commas when entering the numbers.

Maximum Design Capacity. [Q:1.5-387] Enter the maximum design capacity of the refinery in barrels per day (bpd). The maximum operating capacity is also referred to as the name plate design. Do not use commas when entering the numbers.

The throughput capacity of an operable petroleum refinery is expressed in terms of barrels per day of crude capacity, cracking capacity, desulphurization, or amounts of products by grade, etc. In most cases, simply enter the number of barrels a day of crude oil processed into more refined products.

Refinery Crude Sources. For each of the potential refinery sources listed, enter the typical contribution as a percentage of the total barrels per day. Do not use commas when entering the numbers. If the facility does not receive crude from a listed source, enter 0 in the field.

This question is asking about the sources of the crude supply that is refined at the facility. Enter the percentage of crude that arrives by:

- ship/barge [Q:1.5-388]
- pipeline [Q1.5-389]
- Strategic Petroleum Reserve (SPR) [Q1.5-390]
- rail [Q:1.5-391]
- truck [Q:1.5-392]

Regional Market Share. For each type of product listed, enter the percentage of market share and the region to which it is supplied. If the refinery does not supply to a listed market, leave the field blank.



- gasoline,[Q:1.51-655]
- diesel [Q:1.5-657]
- jet fuel/kerosene [Q:1.5-659]
- LPG [Q1:1.5-661]
- home heating oil [Q:1.5-663]

The states/regions that are supplied from the facility should include states or areas of the U.S. where the refinery's products are sold (for example, Northern California).

3.2 Airport Fuels Supplier

If the refinery is a direct supplier to a **major metropolitan airport** [Q:1.52-374], enter *Yes* and enter the name (s) of the airport. Then, enter the percentage (0% to 100%) of gasoline and/or jet fuel/kerosene that the facility supplies to the airport (s). Rows can be added if the refinery is a supplier to more than one major metropolitan airport.

A major metropolitan airport is an international airport or other airport serving a major urban area. General aviation, military, and other airports/bases are not considered major airports for the purposes of this question.

3.3 Military Installation Supplier

If the refinery is a direct supplier to a **military installation** [Q:1.54-380], enter *Yes* and enter the name (s) of the military installation. For each military installation entered, enter the refinery's percentage (0% to 100%) of total deliveries of gasoline, diesel and/or aviation fuel to the installation. Rows can be added if the refinery is a supplier to more than one military installation. [Q:1.55-381 to Q:1.55-384] Enter 0 as a value if the refinery does not supply that product. Do not leave the field blank.

At this point in Top-Screen, users will be prompted to answer questions regarding other listed materials potentially onsite. These materials include listed toxic, flammable, and explosive chemicals, sabotage/contamination chemicals, chemicals that can be used as improvised explosive devices, chemical weapons and/or chemical weapon precursors at or above Screening Threshold Quantities. For instructions on answering this portion of Top-Screen, please refer to section 5.0.

4.0 LNG Storage Facilities

The following LNG-specific questions will be required if the user chose *LNG Storage facility* as the best description of the facility in Question 1.1-65. After completion of the LNG Storage specific questions, a series of other questions about chemicals that may be onsite at or above Screening Threshold Quantities will be displayed. The following section relates only to the LNG Facilities. Questions relating to chemical manufacturing,



use, storage and distribution are covered in section 5.0. Questions relating to economically critical and mission-critical chemical production are in section 5.8 and 5.9.

4.1 LNG Capacity

Enter the **LNG storage capacity** [Q:1.6-618] for the facility in cubic meters. If there are multiple storage tanks onsite, report the total amount kept onsite in all of the tanks. For example, if there are three 100,000 m³ LNG storage tanks onsite, then 300000 m³ should be entered. Do not use commas when entering the numbers.

Enter the **regasification rate** (billion cubic feet (Bcf) per day).[Q:1.6-619] Report the annual average. Do not use commas when entering the data.

The regasification rate refers to the conversion of LNG stored as a liquid into a vapor for transport to users and is specific to the unit or facility. Check with the facility's Operations Department to determine the rate for the facility or process unit.

Enter the name of the **natural gas pipeline system(s)** [Q:1.6-620] the facility feeds. This should be the main tie-in point for natural gas from this facility.

4.2 LNG Exclusion Zone

Indicate whether this facility is sited according to the 49 CFR 193 (Liquefied Natural Gas: Federal Safety Standards) **exclusion zone requirements** [Q: 1.92-667] or thermal radiation and flammable vapor dispersion. If *No*, click the **Next** button enter the reason why the facility was exempted from the regulation in the text field on the next screen.

An exclusion zone is an area surrounding an LNG facility in which an operator or government agency legally controls all activities in accordance with 49 CFR 193.2057 and 49 CFR 193.2059 for as long as the facility is in operation. These requirements are designed to prevent a flammable vapor cloud associated with an LNG spill from reaching a property line or to prevent the thermal radiation from ignition of vapors to exceed specified levels. These siting requirements are provisions to minimize the possibility of the damaging side effects of fire reaching beyond a property line. 49 CFR 193 incorporates NFPA 59A (Standard for the Production, Storage and Handling of Liquefied Natural Gas) by reference. Click here for a link to 49 CFR 193
http://www.access.gpo.gov/nara/cfr/waisidx_06/49cfr193_06.html.

4.3 LNG Exclusion Details

Provide the distance (in feet) of the 5kW/m² **thermal radiation zone** using the 49 CFR 193 siting requirements (§193.2057). [Q:1.93-670]



Provide the distance (in feet) to $\frac{1}{2}$ the **Lower Flammability Limit** ($\frac{1}{2}$ LFL) using the 49 CFR 193 siting requirements (§193.2059). [Q:1.93-671]

At this point in Top-Screen, users will be prompted to answer questions regarding other listed materials potentially onsite. These materials include listed toxic, flammable, sabotage/contamination and explosive chemicals, chemicals that can be used as improvised explosive devices, chemical weapons and/or chemical weapon precursors at or above Screening Threshold Quantities. For instructions on answering this portion of Top-Screen, please refer to section 5.0.

5.0 Chemical Manufacturing, Processing, Use, Storage or Distribution

The following chemical-specific questions will be required if the facility was designated as a chemical manufacturing, use, processing, storage or distribution facility. This series of questions will also be required for other facilities after answering the specific LNG storage and Refinery questions.

5.1 Release of Toxic Chemicals

Toxic Chemicals Present Onsite. [Q:2.0-121] Does the facility manufacture, process, use, store or distribute any of the listed toxic chemicals at or above the Screening Threshold Quantity (STQ) listed below? If the facility has any of the listed chemicals onsite, or had them onsite over the past 12 months, select the chemical from the list (see below for an example)³. The default settings for the list indicate that the chemical is **not** present on the site. The Preparer must affirmatively change the answer for each chemical found onsite.

The Screening Threshold Quantity means the quantity of a chemical of interest upon which the facility's obligation to complete and submit the CSAT Top-Screen is based. STQs are listed in Appendix A to 6 CFR Part 27 rule and are also shown in the lists presented in Top-Screen.

What is a toxic chemical?

In this list, toxic chemicals are those that DHS believes, if released, have the potential for significant *acute* adverse consequences for human life or health.

³ If the facility plans to add chemicals on the list of chemicals of interest at or above the STQ in the future, this may constitute a material modification to an operation or a site and may trigger a need to notify the Department within 60 days of such a modification. In such instances, facilities must complete and submit a revised Top-Screen to the Department within 60 days of the notification in accordance with §27.210 (d). See the preamble to 6 CFR Part 27 for a more complete discussion of how to handle chemicals added to a site in the future.



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Toxic Chemicals of Concern

The presence or amount of a particular chemical is not the sole factor in determining whether a facility presents a high level of security risk. This information informs the subsequent parts of the Department's assessment. The Department will use its best judgment and all available information in determining whether a facility presents a high level of security risk.

Do you manufacture, process, use, store, or distribute any of the following toxic chemicals at your facility?
Check "Yes" if the chemical is present on site at or above the screening threshold quantity.

(The default settings on this list indicate that the chemicals are NOT present on site. At the end of the list, you must indicate that these settings have been changed as needed for your facility.)

These chemicals were determined by the US Department of Homeland Security to be a potential security risk at "high risk chemical facilities" as defined in Section 550 the Department of Homeland Security Act of 2007. Chemicals should be selected if they were on site at or above the screening threshold quantity at any time over the past 12 months.

[Q.2.0-121]

Chemical Name	CAS#	Screening Threshold Quantity		
Acrolein [2-Propenal]	107-02-8	3,750 lbs	☐ Yes	☒ No
Allyl alcohol [2-Propen-1-ol]	107-18-6	11,250 lbs	☐ Yes	☒ No

*Screen depicts Appendix A listing and STQ as of 4-9-07

To calculate whether the site has any of the listed chemicals at or above the STQ, the user should consider quantities in various processes, vessels, piping, containers (including cylinders, totes, railcars adjacent to the property, etc.) and laboratories.

Select all applicable chemicals from the look up table and select *Yes* to affirm that the Preparer has diligently reviewed the list. [Q2.1-631]

The list above has been reviewed and all chemicals present on site have been indicated by selecting "Yes."

☒ Yes
☐ No

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Topography near the Facility. Indicate the **topography** (or surface roughness) [Q:2.1-122] used in the facility's RMP*Comp calculation for the area in which the facility is located (if the facility is covered by RMP).

The characteristics of the topography surrounding a facility will have an effect on the dispersion of a toxic gas cloud. Uneven or rough terrain causes fluctuations in the wind profile and more turbulence. This contributes to a more rapid dispersion and shorter distance of concern. For the Top-Screen, the same definitions as those used by EPA for *urban* and *rural* are used (see 40 CFR 68.22(3) for EPA's definition of *urban* and *rural*).



- **Urban** means that there are many obstacles in the immediate area--obstacles include buildings and trees. An area that may be away from a populated area, but has hills, trees, or canyon walls may be considered urban (not open).
- **Rural** means that there are few or no buildings in the immediate area and the terrain is flat and unobstructed. An area with few buildings or trees should be considered rural (open).

If the facility is covered by RMP, the selection of urban or rural should be consistent with the current RMP that is on file with EPA. If the facility is not covered by RMP and the terrain surrounding the facility is different depending on the approach to the facility, select the topography that is most representative of the facility's location. If unsure, select *rural*.

5.1.1 Reporting the Total Onsite Quantity and Distance of Concern for Toxic Chemicals (using RMP*Comp to calculate).

After the chemicals onsite have been entered, they will be displayed with their CAS⁴ number in a list on the next screen. Users will be asked to provide:

- the total onsite quantity and distance of concern
- the quantity in the Area of Highest Quantity and distance of concern.

First, enter the maximum **total onsite quantity** [Q:2.1-124] of each toxic chemical in pounds at any one time over the past 12 months. If the chemical is present on the site at or above the STQ, report the total of all quantities (the highest amount onsite at any point in time of each listed chemical). The total onsite quantity should be determined irrespective of the interconnection of processes and equipment, or the proximity of different storage containers or locations. Interconnection is a consideration in OSHA's PSM and EPA's RMP programs for determining regulatory quantities of chemicals, but it is not a consideration for Top-Screen. The records used to prepare the annual Tier 2 report under the EPCRA are a good source to determine the total quantity onsite of a given chemical.

Do not use commas when reporting quantities. Round to two significant digits and report quantities as follows (similar to the way quantities are rounded and reported in RMP):

5,333 pounds should be reported as 5300 pounds
107,899 pounds should be reported as 110000 pounds

⁴ A Chemical Abstract Services (CAS) Registry number is a unique numeric identifier for chemical compounds, polymers, mixtures and alloys assigned by the Chemical Abstract Service to every chemical that has been described in open literature. Referring to chemicals by CAS number avoids confusion among different nomenclature systems and conventions.



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128,000 pounds should be reported as 130000 pounds

The total onsite quantity should also include all quantities of chemicals that may be found in laboratories or similar locations as well as quantities in railcars on or adjacent to the property (such that an intelligent adversary could reasonably anticipate their presence) even if the railcars are only present some of the time (the highest on-site quantity over the past 12 months is to be reported).

Do not include the amount of captive production chemicals (chemicals that the facility is making and consuming continuously within a process).

Documented administrative controls that limit the maximum quantity in tanks and vessels can be accounted for in the estimate of the total onsite quantity. If no administrative controls are in place, the total capacity of all vessels, tanks, and piping is used.

Users may refer to Attachment A of this document for worksheets and an example of how to assemble information for reporting Total Onsite Quantity.

Enter the total onsite quantity of the toxic chemical of concern (in hundreds of pounds). Enter the distance of concern reported by RMP*Comp (miles).

Enter the highest amount (rounded to hundreds of pounds) that is expected to be at your facility at any time in a 12-month period.
The Distance of Concern that should be reported is the downwind distance calculated using RMP*Comp for total onsite quantity of the regulated chemical, using additional process conditions for this chemical. Report all distances shorter than 0.1 mile as 0.1 mile, and all distances 25 miles or longer as 25 miles. (RMP*Comp can be downloaded from <http://hosemile.epa.gov/oswer/ceppoweb.nsf/content/comp-dwn.htm>)

[Q:2.1-124]
[Q:2.1-126]

Chemical Name	CAS#	Screening Threshold Quantity	Total Onsite Quantity (pounds)	Distance of Concern (miles)
Acrolein [2-Propenal]	107-02-8	3,750 lbs		
Allyl alcohol [2-Propen-1-ol]	107-18-6	11,250 lbs		
Epichlorohydrin [Oxirane, (chloromethyl)-]	106-89-8	15,000 lbs		

*Screen depicts Appendix A listing and STQ as of 4-9-07.

Distance of Concern. For each listed toxic chemical, the **distance of concern** [Q:2.1-126] that should be reported is the downwind distance calculated using RMP*Comp for the regulated chemical's total onsite quantity, using additional process conditions for this chemical. Report all distances shorter than 0.1 mile as 0.1 mile, and all distances 25 miles or greater as 25 miles.

The purpose of reporting the Distance of Concern in Top-Screen is to inform DHS of the potential for offsite impacts from an intentional release of listed toxics. The basis for these calculations is the *EPA Risk Management Guidance for Offsite Consequence Analysis*. Unlike EPA's Risk Management Program, which



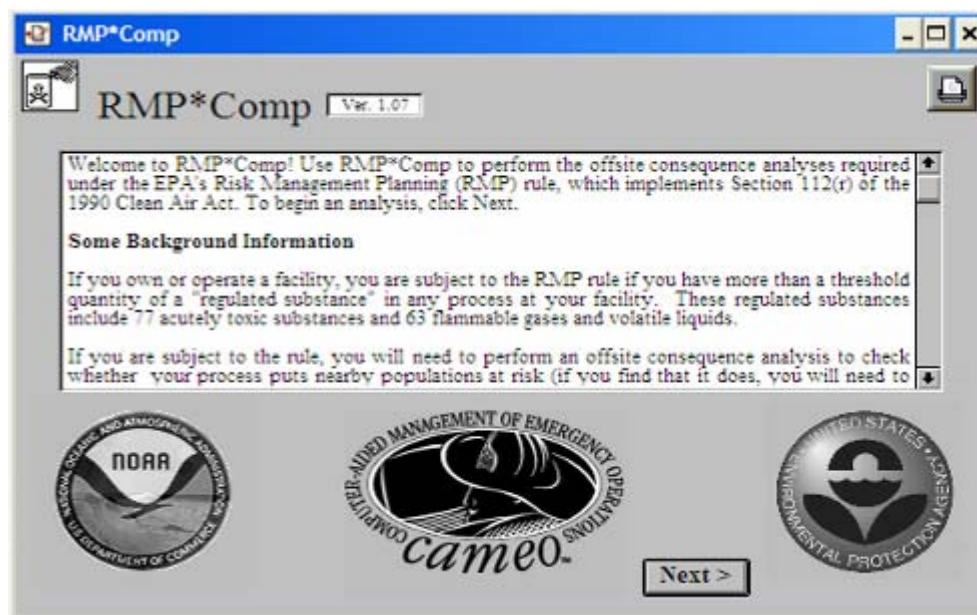
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used these calculations to inform the community of a possible danger so that they may be prepared in the event of an accidental release, DHS will use the distance of concern to estimate the potential level of impact. This calculation provides DHS with a better estimate of the potential level of impacts to people surrounding a chemical facility if an intentional release of a listed chemical were to occur.

For all listed toxics with a concern for release, the distance of concern is estimated using the RMP*Comp modeling program. RMP*Comp can be downloaded from the EPA website by clicking here: <http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/rmp-comp.htm>.

Use the following instructions for calculating the distance of concern.

Step 1-Open RMP*Comp: When RMP*Comp is opened, a welcome screen with some background information on the tool is displayed. Click the *Next* button to continue.



Step 2-Choose the chemical to be analyzed: On the next screen, verify that the “Single Chemical” option is selected and then click on the chemical to be evaluated. Use the scroll bar to the left of the chemical name, CAS #, and Threat (indication of toxic or flammable properties as defined under EPA RMP*Comp). Click the *Next* button to continue.

Step 3-Type of scenario to Analyze: For the Top-Screen, all toxics must be analyzed using the “Worst-case” scenario type. Click the *Next* button to continue.



The screenshot shows a software window titled "RMP*Comp" with a "Summary of Scenario" section. The text in the summary box reads: "Chemical: Ammonia (anhydrous)", "CAS #: 7664-41-7", "Category: Toxic Gas", and "Toxic Endpoint: 0.14 mg/L; basis: ERPG-2". Below this, a prompt says "Click on the type of scenario to analyze:" followed by two radio button options: "Worst-case" (which is selected) and "Alternative". At the bottom of the window are four buttons: "Start Over", "Tips", "< Back", and "Next >".

Step 4-Chemical Phase: Depending on how the chemical is stored and processed, it can be a gas, a gas stored as a liquid (under refrigeration or pressure), or a liquid. If the chemical selected for evaluation is a toxic gas, RMP*Comp needs additional information to determine if the chemical is “unliquefied” or “liquefied.” Toxic gases include all listed toxic substances that are gases at ambient temperature 25° C, 77° F).

- Selected *Unliquefied* if the chemical is used or stored as a gas under normal operating conditions for your facility.
- Select *Liquefied* if the chemical is used or stored as a liquid under normal operating conditions for your facility.

If *liquefied* is selected, the storage conditions need to be specified. The choices in RMP*Comp are *Liquefied by refrigeration* and *Liquefied by pressure*. Select the appropriate option and click **Next** to continue.

If the chemical selected is a toxic liquid, then the previous screen will not be shown in RMP*Comp. For these toxic liquids, only the operating temperature will be needed as input. The operating temperature for a toxic liquid is requested on the same screen as topography (see step 6 below).

Step 5-Quantity Released. Enter the total onsite quantity of the listed toxic chemical. This is the same quantity that was input into the Top-Screen question regarding total onsite quantity. It must be entered here for RMP*Comp to calculate the distance of concern.

Documented administrative controls that limit the maximum quantity in tanks and vessels can be accounted for in the estimate of the total onsite quantity. If no administrative controls are in place, the total capacity of all vessels, tanks, and piping is used. Click **Next** to continue.



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The screenshot shows a software window titled "RMP*Comp" with a "Summary of Scenario" section. The summary lists the following information:

- Chemical: Ammonia (anhydrous)
- CAS #: 7664-41-7
- Category: Toxic Gas
- Scenario: Worst-case
- Liquefied by refrigeration
- Toxic Endpoint: 0.14 mg/L; basis: ERPG-2

Below the summary, there is a section titled "Type in the quantity released:" with a text input field containing "10000" and a dropdown menu set to "pounds".

A detailed instruction follows: "The quantity that you type in should be the largest quantity of the substance present in a single vessel or pipe at your facility, or else a smaller vessel closer to your facility boundary or in which the substance is at elevated temperature or pressure. When determining the maximum quantity, you may take into account administrative controls that limit the maximum quantity (e.g., a procedural limit of 75% full on all tanks)."

At the bottom of the window, there are four buttons: "Start Over", "Tips", "< Back", and "Next >".

Step 6-Topography: Enter the same topography description that was used to answer the Top-Screen questions about topography described above. RMP*Comp requires this information to be entered to calculate the distance of concern. **The user must enter the same value here.** Click *Next* to continue.

Step 7-Mitigation Measures: RMP*Comp collects information on passive mitigation systems. These mitigation measures may include release into dikes, release into buildings, and release in an enclosed space. Since Top-Screen is evaluating an intentional release, as compared to an accidental release, passive mitigation systems **should not be included** in the determination of the distance of concern. Do not select any option and click *Next* to continue.

Step 8-Estimated Distance of Concern: Once all of the chemical and quantity-specific information is entered, RMP*Comp produces an Estimated Distance to Toxic Endpoint. This distance (in miles) is what is entered into the Top-screen as the Distance of Concern. Report all distances shorter than 0.1 mile as 0.1 mile and all distances 25 miles or longer as 25 miles.

For the example shown below, it can be seen that 10,000 pounds of Ammonia (anhydrous), liquefied by refrigeration results, and with urban terrain results in a distance of concern of 0.6 miles.



The screenshot shows a window titled "RMP*Comp" with a "Summary of Scenario" tab. The summary text is as follows:

Chemical: Ammonia (anhydrous)
CAS #: 7664-41-7
Category: Toxic Gas
Scenario: Worst-case
Liquefied by refrigeration
Quantity Released: 10000 pounds

Estimated Distance to Toxic Endpoint:
.....0.5 miles
.....1.0 kilometers

This is the downwind distance to the toxic endpoint specified for this regulated substance under the RMP Rule. Report all distances shorter than 0.1 mile as 0.1 mile, and all distances longer than 25 miles as 25 miles.

At the bottom of the window are four buttons: "Start Over", "Tips", "< Back", and "Next >".

Repeat these steps using RMP*Comp for each listed toxic chemical for which Top-Screen requests a Distance of Concern.

5.1.2 Reporting the Area of Highest Quantity and Distance of Concern for Toxic Chemicals

Enter **total maximum amount within the Area of Highest Quantity (AHQ)** for each toxic chemical in pounds [Q:2.2-2792]. The total quantity onsite (answered in the previous question) may be different from the total amount in the Area of Highest Quantity. If the toxic chemical of concern is found in only one location onsite, enter the same amount as reported for total onsite quantity.

The AHQ is defined as an onsite area, within a radius of 170 feet, where the greatest amount of the toxic chemical of concern is located. For facilities with chemicals located in more than one area, the amount in the AHQ might be found in a large storage vessel or the area where most of the processing equipment is located.

Distance of Concern for the Amount located in the Area of Highest Quantity. [Q:2.2-2793]. For each listed chemical, the distance of concern for the amount in the AHQ that should be reported is the downwind distance calculated using RMP*Comp. If the amount located in the AHQ is different than the total onsite quantity, calculate the distance of concern using the new amount by following the instructions in section 5.1 above for calculating Distance of Concern with RMP*Comp. Report all distances shorter than 0.1 mile as 0.1 mile and distances 25 miles or longer as 25 miles.



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Toxic Chemicals Present On Site

Enter the quantity of the toxic chemical of concern in the Area of Highest Quantity (in hundreds of pounds).
Enter the distance of concern reported by RMP*Comp (miles) for the Area of Highest Quantity (AHQ).

The Area of Highest Quantity (AHQ) is defined as an onsite area, with a radius of 170 feet, where the greatest amount (rounded to hundreds of pounds) of the toxic chemical of concern is expected to be located at any time in a 12-month period. This amount may differ from the total onsite quantity.

[Q:2.2-2792]
[Q:2.2-2793]

Chemical Name	CAS#	Screening Threshold Quantity	Quantity in AHQ (pounds)	Distance of Concern for AHQ (miles)
Acrolein [2-Propenal]	107-02-8	3,750 lbs		
Allyl alcohol [2-Propen-1-ol]	107-18-6	11,250 lbs		
Epichlorohydrin [Oxirane, (chloromethyl)-]	106-89-8	15,000 lbs		

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*Screen depicts Appendix A chemicals and STQs as published on 4-9-07.

Users may refer to Attachment A of this document for worksheets and an example of how to assemble information for reporting Area of Highest Quantity.

5.2 Release of Flammable Chemicals

Flammable Chemicals Present Onsite. Does the facility manufacture, process, use, store or distribute any of the listed flammable chemicals at or above the listed STQ? If the facility has any of the listed chemicals onsite or at or above the STQ, or had them onsite in the past 12 months, select the chemical from the list⁵. [Q:3.0-129] The default settings for the list indicate that the chemical is **not** present on the site. The Preparer must affirmatively change the answer for each chemical found onsite. Select all applicable chemicals from the look up table and select *Yes* at the end to affirm that the Preparer has diligently reviewed the list. [Q:3.0-632]

The Screening Threshold Quantity means the quantity of a chemical of interest upon which the facility's obligation to complete and submit the CSAT Top-Screen is based.

What is a flammable chemical?

In this list, flammable chemicals are those that DHS believes, if released, will form a

⁵ If the facility plans to add chemicals on the list of chemicals of interest at or above the STQ in the future, this may constitute a material modification to an operation or a site and may trigger a need to notify the Department within 60 days of such a modification. In such instances, facilities must complete and submit a revised Top-Screen to the Department within 60 days of the notification in accordance with §27.210 (d). See the preamble to 6 CFR Part 27 for a more complete discussion of how to handle chemicals added to a site in the future



vapor cloud and, if ignited, have the potential for significant acute adverse consequences for human life or health due to explosion and fire.

To calculate whether the site has any of the listed chemicals at or above the STQ, the user should consider quantities in various processes, vessels, piping, containers (including cylinders, totes, railcars adjacent to the property, etc.) and laboratories.

5.2.1 Reporting the Total Onsite Quantity of Flammable Chemicals

After the flammable chemicals onsite have been entered, they will be displayed with their CAS number in a list on the next screen. Enter the maximum **total onsite quantity** [Q:3.1-131] of each flammable chemical in pounds. If the chemical is present on the site at or above the STQ, report the total of all quantities (the highest amount expected to be onsite of each listed chemical). The total onsite quantity should be determined irrespective of the interconnection of processes and equipment, or the proximity of different storage containers or locations. Interconnection is a consideration in OSHA's PSM and EPA's RMP programs for determining regulatory quantities of chemicals, but it is not a consideration for Top-Screen. The records used to prepare the annual Tier 2 report under the EPCRA are a good source to determine the total quantity onsite of a given chemical.

Do not use commas when reporting quantities. Round to two significant digits and report quantities as follows (similar to the way quantities are rounded and reported in RMP):

5,333 pounds should be reported as 5300 pounds
107,899 pounds should be reported as 110000 pounds
128,000 pounds should be reported as 130000 pounds

The total onsite quantity should also include all quantities of chemicals that may be found in laboratories or similar locations as well as quantities in railcars on or adjacent to the property (such that an intelligent adversary could reasonably anticipate their presence) even if the railcars are only present some of the time (the highest on-site quantity over the past 12 months is to be reported).

Do not include the amount of captive production chemicals (chemicals that the facility is making and consuming continuously within a process).

Documented administrative controls that limit the maximum quantity in tanks and vessels can be accounted for in the estimate of the total onsite quantity. If no administrative controls are in place, the total capacity of all vessels, tanks, and piping is used.

5.2.2 Reporting the Quantity of Flammable Chemicals in the Area of Highest Quantity



Enter maximum **total amount within the Area of Highest Quantity (AHQ)** [Q:3.1-2794] for each flammable chemical in pounds. The total quantity onsite (answered in the previous question) may be different from the total amount in the Area of Highest Quantity. If the flammable chemical of concern is found in only one location onsite, enter the same amount as reported for total onsite quantity.

The AHQ is defined as an onsite area, within a radius of 170 feet, where the greatest amount of the flammable chemical of concern is located. For facilities with chemicals located in more than one area, the amount in the AHQ might be found in a large storage vessel or the area where most of the processing equipment is located.

5.3 Release of Explosive Chemicals

Presence of Explosive Chemicals Onsite. Does the facility manufacture, process, use, store or distribute any of the listed explosive chemicals at or above the listed STQ? If the facility has any of the listed chemicals onsite at or above the STQ, or had them onsite at or above the STQ any time in the past 12 months, select the chemical(s) from the list.⁶ [Q:4.0-154] The default settings for the list indicate that the chemical is **not** present on the site. The Preparer must affirmatively change the answer for each chemical found onsite. Select all applicable chemicals from the look up table and select Yes at the end to affirm that the Preparer has diligently reviewed the list. [Q:4.0-711]

The Screening Threshold Quantity means the quantity of a chemical of interest upon which the facility's obligation to complete and submit the CSAT Top-Screen is based.

What is an explosive chemical?

In this list, DHS has included DOT Class 1 Division 1.1 Explosives, materials with a mass explosion hazard (see 49 CFR 173.50). DHS believes that, if released, these chemicals have the potential for significant adverse acute consequences for human life or health due to explosion and fire.

To calculate whether the site has any of the listed chemicals at or above the STQ, the user should consider quantities in various processes, vessels, piping, containers (including cylinders, totes, railcars adjacent to the property, etc.) and laboratories.

⁶ If the facility plans to add chemicals on the list of chemicals of interest at or above the STQ in the future, this may constitute a material modification to an operation or a site and may trigger a need to notify the Department within 60 days of such a modification. In such instances, facilities must complete and submit a revised Top-Screen to the Department within 60 days of the notification in accordance with §27.210 (d). See the preamble to 6 CFR Part 27 for a more complete discussion of how to handle chemicals added to a site in the future.



5.3.1 Reporting the Total Quantity of Explosive Chemicals Onsite

After the explosive chemicals onsite have been entered, they will be displayed with their CAS number in a list on the next screen. Enter the **total onsite quantity** [Q:4.1-712] of each explosive chemical in pounds. If the chemical is present on the site at or above the STQ, report the total of all quantities (the highest amount expected to be onsite of each listed chemical). The total onsite quantity should be determined irrespective of the interconnection of processes and equipment, or the proximity of different storage containers or locations. Interconnection is a consideration in OSHA's PSM and EPA's RMP programs for determining regulatory quantities of chemicals, but it is not a consideration for Top-Screen.

Do not use commas when reporting quantities. Round to two significant digits and report quantities as follows (similar to the way quantities are rounded and reported in RMP):

5,333 pounds should be reported as 5300 pounds
107,899 pounds should be reported as 110000 pounds
128,000 pounds should be reported as 130000 pounds

The total onsite quantity should also include all quantities of chemicals that may be found in laboratories or similar locations as well as quantities in railcars on or adjacent to the property (such that an intelligent adversary could reasonably anticipate their presence) even if the railcars are only present some of the time (the highest on-site quantity over the past 12 months is to be reported).

The total onsite quantity should also include all quantities of chemicals that may be found in laboratories or similar locations as well as quantities in railcars on or adjacent to the property (such that an intelligent adversary could reasonably anticipate their presence). The records used to prepare the annual Tier 2 report under the EPCRA are a good source to determine the total quantity onsite of a given chemical.

Do not include the amount of captive production chemicals (chemicals that the facility is making and consuming continuously within a process).

Documented administrative controls that limit the maximum quantity in tanks and vessels can be accounted for in the estimate of the total onsite quantity. If no administrative controls are in place, the total capacity of all vessels, tanks, and piping is used.

5.3.2 Reporting the Quantity of Explosive Chemicals in the Area of Highest Quantity

Enter maximum **total amount within the Area of Highest Quantity (AHQ)** [Q:4.1-2795] of each explosive chemical in pounds. The total quantity onsite (answered in the previous question) may be different from the total amount in the Area of Highest



Quantity. If the explosive chemical of concern is found in only one location onsite, enter the same amount as reported for total onsite quantity.

The AHQ is defined as an onsite area, within a radius of 170 feet, where the greatest amount of the explosive chemical of concern is located. For facilities with chemicals located in more than one area, the amount in the AHQ might be found in a large storage vessel or the area where most of the processing equipment is located.

5.4 Theft/Diversion of IED Precursor Chemicals

Presence of IED Precursor Chemicals Onsite. Does the facility manufacture, process, use, store or distribute IED precursor chemicals at or above the STQ? [Q:5.0-175] If the facility has any of the listed chemicals onsite at or above the STQ, or had them onsite at or above the STQ over the past 12 months, select the chemical(s) from the list.⁷ The default settings for the list indicate that the chemical is **not** present on the site. The Preparer must affirmatively change the answer for each chemical found onsite. Select all applicable chemicals from the look up table and select Yes at the end to affirm that the Preparer has diligently reviewed the list. [Q:5.0-714]

The Screening Threshold Quantity means the quantity of a chemical of interest upon which the facility's obligation to complete and submit the CSAT Top-Screen is based.

What is an IED Precursor Chemical?

In this list, an Improvised Explosive Device precursor is a chemical that DHS believes, if stolen or diverted, could be used directly as an explosive or to develop an improvised explosive device to create significant adverse consequences for human life or health.

To calculate whether the site has any of the listed chemicals at or above the STQ, the user should consider quantities in various processes, vessels, piping, containers (including cylinders, totes, railcars adjacent to the property, etc.) and laboratories.

Storage of Explosive/IED Precursor Chemicals Onsite. After the IED precursor chemicals onsite have been entered, they will be displayed with their CAS numbers in a list on the next screen. Select how each IED precursor chemical is stored onsite:

⁷ If the facility plans to add chemicals on the list of chemicals of interest at or above the STQ in the future, this may constitute a material modification to an operation or a site and may trigger a need to notify the Department within 60 days of such a modification. In such instances, facilities must complete and submit a revised Top-Screen to the Department within 60 days of the notification in accordance with §27.210 (d). See the preamble to 6 CFR Part 27 for a more complete discussion of how to handle chemicals added to a site in the future.



- **Man-portable:** A man-portable container can be moved by 1-3 people without the aid of powered mechanical devices such as fork lifts, trucks or cranes. For gases, man-portable containers are containers of any size up to and including DOT Cylinder Specification 3AA2400 which has a tare weight of 135 lbs and a volume of 1.76 cu ft/49.8 liters. Such containers weigh up to about 400 lbs fully loaded. Note that cylinder tare weight and volume may vary slightly from company to company for those that supply industrial gas in cylinder quantities. [Q:5.1-233]
- **Bulk Transportation:** Bulk transportation containers include tank cars and other large storage containers that could be hitched to a vehicle for removal from a site. Other bulk transportation containers, such as barges and rail cars may be considered credible theft/diversion targets. [Q:5.1-234]
- **Bulk Storage:** A bulk storage container is one from which the material could be safely removed without undue potential harm or without the use of special equipment. For example, a bulk storage container, for the purposes of this screening question, is a fixed container, such as vessels and tanks that are used to store chemicals onsite. These containers are not mobile and are connected to site processes by piping. [Q:5.1-235]

5.5 Theft/Diversion of Weapon of Mass Effect (WME) Chemicals

Presence of WME Chemicals Onsite. Does the facility manufacture, process, use, store or distribute any of the listed WME chemicals at or above the STQ? [Q:6.0-251] If the facility has any of the listed chemicals onsite at or above the STQ, or had them onsite at or above the STQ over the past 12 months, select the chemical(s) from the list.⁸ The default settings for the list indicate that the chemical is **not** present on the site. The Preparer must affirmatively change the answer for each chemical found onsite. Select all applicable chemicals from the look up table and select Yes at the end to affirm that the Preparer has diligently reviewed the list. [Q:6.0-715]

The Screening Threshold Quantity means the quantity of a chemical of interest upon which the facility's obligation to complete and submit the CSAT Top-Screen is based.

What is a Weapon of Mass Effect?

⁸ If the facility plans to add chemicals on the list of chemicals of interest at or above the STQ in the future, this may constitute a material modification to an operation or a site and may trigger a need to notify the Department within 60 days of such a modification. In such instances, facilities must complete and submit a revised Top-Screen to the Department within 60 days of the notification in accordance with §27.210 (d). See the preamble to 6 CFR Part 27 for a more complete discussion of how to handle chemicals added to a site in the future.



For this list, a Weapon of Mass Effect is an industrial gas that can be used as a weapon without reacting with other chemicals to create a third material. The Department of Transportation (DOT) and the United Nations define such materials as Class 2, Division 2.3 (gas poisonous by inhalation).

To calculate whether the site has any of the listed chemicals at or above the STQ, the user should consider quantities in various processes, vessels, piping, containers (including cylinders, totes, railcars adjacent to the property, etc.) and laboratories.

Storage of WME Chemicals Onsite. After the WME chemicals onsite have been entered, they will be displayed with their CAS numbers in a list on the next screen. Select how each WME chemical is stored onsite:

- **Man-portable:** A man-portable container can be moved by 1-3 people without the aid of powered mechanical devices such as fork lifts, trucks or cranes. Man-portable containers are containers of any size up to and including DOT Cylinder Specification 3AA2400 which has a tare weight of 135 lbs and a volume of 1.76 cu ft/49.8 liters. Such containers weigh up to about 400 lbs fully loaded. Note that cylinder tare weight and volume may vary slightly from company to company for those that supply industrial gas in cylinder quantities. [Q:6.1-253]
- **Bulk Transportation:** Bulk transportation containers include tank cars, and other large storage containers that could be hitched to a vehicle for removal from a site. Other bulk transportation containers, such as barges and rail cars may be considered credible theft/diversion targets. [Q:6.1-254]

5.6 Theft/Diversion of Chemical Weapons/Chemical Weapon Precursor Chemicals

Presence of CW/CWP Chemicals Onsite. Does the facility manufacture, process, use, store or distribute the following CW/CWP chemicals at or above the STQ? [Q:7.0-257] If the facility has any of the listed chemicals onsite at or above the STQ, or had them onsite at or above the STQ over the past 12 months, select the chemical(s) from the list.⁹ The default settings for the list indicate that the chemical is **not** present on the site. The Preparer must affirmatively change the answer for each chemical found onsite. Select all applicable chemicals from the look up table and select *Yes* at the end to affirm that the Preparer has diligently reviewed the list. [Q:7.0-721]

⁹ If the facility plans to add chemicals on the list of chemicals of interest at or above the STQ in the future, this may constitute a material modification to an operation or a site and may trigger a need to notify the Department within 60 days of such a modification. In such instances, facilities must complete and submit a revised Top-Screen to the Department within 60 days of the notification in accordance with §27.210 (d). See the preamble to 6 CFR Part 27 for a more complete discussion of how to handle chemicals added to a site in the future.



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The Screening Threshold Quantity means the quantity of a chemical of interest upon which the facility's obligation to complete and submit the CSAT Top-Screen is based.

What is a Chemical Weapon/Chemical Weapon Precursor?

For this list, Chemical Weapons and Chemical Weapon Precursors identified in the Chemical Weapons Convention (CWC). Actual "weapons" are those that have been developed, produced, stockpiled or used as a chemical weapon. Listed "precursors" are also specified in the CWC list of controlled substances and could be converted into weapons using simple chemistry, equipment or techniques.

Click here for information on the Chemical Weapons Convention: <http://www.cwc.gov/>.

To calculate whether the site has any of the listed chemicals at or above the STQ, the user should consider quantities in various processes, vessels, piping, containers (including cylinders, totes, railcars adjacent to the property, etc.) and laboratories.

Storage of Chemical Weapons/Chemical Weapon Precursors Onsite. After the Chemical Weapon/Chemical Weapon Precursors onsite have been entered, they will be displayed with their CAS numbers in a list on the next screen. Select how each CW/CW precursor chemical is stored onsite:

- **Man-portable:** Man-portable means this material can be moved by 1-3 people without the aid of powered mechanical devices such as fork lifts, trucks or cranes. Man-portable containers are containers of any size up to and including DOT Cylinder Specification 3AA2400 which has a tare weight of 135 lbs and a volume of 1.76 cu ft/49.8 liters. Such containers weigh up to about 400 lbs fully loaded. Note that cylinder tare weight and volume may vary slightly from company to company for those that supply industrial gas in cylinder quantities. [Q:7.1-260]
- **Bulk Transportation:** Bulk transportation containers include tank cars and other large storage containers that could be hitched to a vehicle for removal from a site. Other bulk transportation containers, such as barges and rail cars may be considered credible theft/diversion targets. [Q:7.1-261]
- **Bulk Storage:** A bulk storage container is one from which the material could be safely removed without undue potential harm or without the use of special equipment. For example, a bulk storage container, for the purposes of this screening question, is a fixed container, such as vessels and tanks that are used to store chemicals onsite. These containers are not mobile and are often connected to site processes by piping. [Q:7.1-262]



5.7 Sabotage/Contamination Chemicals

Presence of Sabotage/Contamination Chemicals Onsite. Does the facility ship any of the listed sabotage/contamination chemicals in amounts at or above the STQ? [Q:8.1-722] If the facility ships any of the listed chemicals from the site and has them onsite at or above the STQ, or had them onsite at or above the STQ over the past 12 months, select the chemical(s) from the list.¹⁰ The default settings for the list indicate that the chemical is **not** shipped from the site. The Preparer must affirmatively change the answer for each chemical found onsite. Select all applicable chemicals from the look up table and select Yes at the end to affirm that the Preparer has diligently reviewed the list. [Q:8.1-718]

The Screening Threshold Quantity means the quantity of a chemical of interest upon which the facility's obligation to complete and submit the CSAT Top-Screen is based.

What is a sabotage/contamination chemical?

For this list, sabotage/contamination chemicals are those that will produce a large quantity of toxic-by-inhalation gas when exposed to water as identified in the 2004 DOT Emergency Response Guidebook. Click here for the guidebook:

<http://hazmat.dot.gov/pubs/erg/guidebook.htm>.

To calculate whether the site has any of the listed chemicals at or above the STQ, the user should consider quantities in various processes, vessels, piping, containers (including cylinders, totes, railcars adjacent to the property, etc.) and laboratories.

Storage of Sabotage/contamination Chemicals Onsite. After the sabotage/contamination chemicals that are shipped from the site have been entered, they will be displayed with their CAS numbers in a list on the next screen. Select *bulk transport* for the storage of each sabotage/contamination chemical, if applicable. If the sabotage/contamination chemical is not stored in bulk transport containers, leave this field blank.

- **Bulk Transportation:** Bulk transportation containers for this category of chemicals include tank cars and rail cars only. [Q:8.2-720]

¹⁰ If the facility plans to add chemicals on the list of chemicals of interest at or above the STQ in the future, this may constitute a material modification to an operation or a site and may trigger a need to notify the Department within 60 days of such a modification. In such instances, facilities must complete and submit a revised Top-Screen to the Department within 60 days of the notification in accordance with §27.210 (d). See the preamble to 6 CFR Part 27 for a more complete discussion of how to handle chemicals added to a site in the future.



5.8 Mission Critical Chemicals

All Petroleum Refinery, LNG Storage and Chemical Manufacturing facilities will be directed to the section on Mission Critical Chemicals. In this section, the Preparer will answer questions if the facility accounts for 20% or more of the domestic productions of any one chemical to a listed infrastructure sector irrespective of their listing in a previous section.

Total production value. Enter the total production value of products shipped and other receipts from the facility. Enter the whole number without commas or dollar signs (i.e., enter 1200000 not 1.2 million). [Q:9.0-3092]

This value will be the same as that provided in the **Annual Survey of Manufactures** which provides sample estimates of statistics for all manufacturing establishments with one or more paid employee. The U.S. Census Bureau conducts the ASM in each of the 4 years between the Economic Census which is collected for years ending in 2 and 7. The Economic Census - Manufacturing is the sample frame from which the ASM is chosen and presents more detailed data than the ASM. Among the statistics included in this survey: employment, payroll, value added by manufacture, cost of materials consumed, value of shipments, detailed capital expenditures, supplemental labor costs, fuels and electric energy used, and inventories by stage of fabrication.

Facilities which responded to the 2006 ASM should provide the response to survey Question 5 “SALES, SHIPMENTS, RECEIPTS, OR REVENUE -- Total value of products shipped and other receipts (rounded to thousands of dollars).” If the facility/company took part in this survey, the answers to the survey questions are probably available from the facility/corporate financial department.

[The following is extracted from the 2006 Annual Survey of Manufactures]

Form MA-10000(S) (10-11-2006)

5 SALES, SHIPMENTS, RECEIPTS, OR REVENUE		2006			2005
		\$ Bil.	Mil.	Thou.	\$ Thou.
Total value of products shipped and other receipts (Report detail in 2.). 0100					

Mark "X" if None ☐

Report the total value of products shipped, including interplant transfers, exports, and other receipts as entered in item 22. The value in item 5, should be the same as the value reported in item 22, code 7700000.



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If not shown, please enter your 11-digit Census File Number (CFN) from the mailing address.

22 DETAIL OF SALES, SHIPMENTS, RECEIPTS, OR REVENUE

If you cannot locate the description of any products that you produce, please enter a description of your products in column (a) and enter their value in column (c). If additional lines are needed please use the "REMARKS" section. Report separately for each major kind of product. Include the value of products exported and interplant transfers in the appropriate product line. They should also be reported separately in 5.

An asterisk (*) at the end of a description denotes a comparability with products collected on a Current Industrial Report (CIR) questionnaire. See paragraph on "Comparability" in Part C of CIR instruction manual for item code references.

Enter TOTAL value of shipments under code 7700000.

Products and services (a)	Product Class code (b)	Products shipped and other receipts, including interplant transfers and exports			
		2006 (c)			2005 (d)
		\$ Bil.	Mil.	Thou.	\$ Thou.
	018				

Facilities may provide response from previous survey *if the numbers accurately reflect current facility operations*. Otherwise, the facility should calculate the amount using instructions for the most recent survey. For more information on the Economic Census, click here <http://www.census.gov/econ/census02/index.html>.

Mission Critical Production. Does this facility account for 20% or more of the domestic production of any one chemical to one or more critical infrastructure sectors? The critical infrastructure sectors are defined as Defense Industrial Base, Energy (electric generation only), Public Health and Healthcare, or Public Drinking Water. Select Yes or No. A facility may produce more than one chemical that meets the criteria. [Q:9.0-692]

- The **Defense Industrial Base** consists of the Department of Defense, government, and private sector industrial complex with capabilities to perform research and development, design, produce and maintain military weapon systems, subsystems, components and parts to meet military requirements.
- **Public Health or Healthcare** refers to public or private facilities which provide health-care services to the individual (generally referred to as Healthcare) or to the population including communities, at the workplace or academic institutions, and in the military (generally referred to as Public Health) as well as supporting services.
- The **Energy (electric generation only)** sector includes facilities converting other forms of energy (such as water power, fossil fuels, nuclear power, and solar power) into electrical energy.



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- The **Public Drinking Water** sector includes facilities which serve at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

Mission Critical Chemicals

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Enter the chemical name(s) that account for 20% of the domestic production to one or more critical infrastructure sectors. The critical infrastructure sectors are defined as Defense Industrial Base, Energy (electric generation only), Public Health and Healthcare, or Public Drinking Water.

Click the "Add" button after entering the chemical name.

[Q:9.1-693]

Chemical Name

[Delete](#) [Describe:](#) [Add](#)

Have you listed all chemicals that account for 20% of the domestic production to one or more critical infrastructure sectors?

Further chemical information. If the response is *Yes* and this facility accounts for 20% or more of the domestic production of any one chemical to one or more critical infrastructure sectors listed above, the user will be directed to supply additional information on each such chemical. If needed, click the **Add** button to add rows. For each chemical, click the **Describe** button and the following information will be required:

- **Chemical name;** [Q:9.1-693];
- **CAS#** (if available) [Q:9.3-852];
- Any **other name** by which the chemical is commonly known (for example, Trinitrophenol is also known as Picric acid) [Q:9.3-733];
- Select the appropriate range to represent the facility's **estimated domestic market share** of this chemical from the drop-down box [Q:9.3-734];
- Enter the **primary application** of this chemical by this facility's customer(s) (for example, a chemical used to treat drinking water may be described in this field as "water treatment chemical") [Q:9.3-737];
- Select the **primary sector** for which this facility produces the chemical. Select from the list all that apply for each chemical [Q:9.3-1131];
- Select whether there is an **exact or direct substitute(s)** available for this chemical produced to meet the needs of the facility's customers (*Yes* or *No*). If *Yes*, select whether the exact or direct substitute is available in North America [Q:9.4-755] or overseas [Q:9.4-756];
- Select whether a **functional substitute(s)** is available. If *Yes*, select whether the functional substitute is available in North America [Q:9.4-759] or overseas [Q:9.4-760];



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A **functional substitute** is another chemical that can accomplish the same function as the chemical made by this facility. For example, one solvent could be substituted for another solvent in the same application with little impact on product quality or processing.

- Select the facility's estimated annual average **Capacity Utilization Rate** from the range of values provided in the drop-down box. [Q9.5-762]

The "capacity utilization rate" is also known as the operating rate for production of this chemical or product at this facility. The information requested is the same as that which may have already been provided as part of the U.S. Census Bureau's **Survey of Plant Capacity Utilization** (form MQ-C1, question 2c). The Survey of Plant Capacity Utilization provides current data on the rates of capacity utilization in U.S. manufacturing plants. The Survey collects information annually from approximately 17,000 manufacturing sites with more than 5 employees. The answers to these Census Bureau questions may be available from the facility or corporate financial department.

FORM MQ-C1 (11-17-2005)	OMB No. 0607-0175: Approval Expires 8/31/2007 U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU
SURVEY OF PLANT CAPACITY UTILIZATION FOURTH QUARTER 2005 (October-December)	

While data is reported on the Census Bureau survey for one quarter; DHS is seeking an estimate of the data for a one-year period. The instructions for calculating the full production rate for the survey are available at <http://www.census.gov/cir/www/mqc1pag2.html>.

Item 2	VALUE OF PRODUCTION	ACTUAL PRODUCTION				
		4th QTR. 2005		4th QTR. 2004		
		\$	Mil.	Thou.	Mil.	Thou.
a.	Report market value of actual production for the 4th quarter of 2005	23				
b.	Estimate the market value of production of this plant as if it had been operating at full production capability in the 4th quarter of 2005. Assume: - only machinery and equipment in place and ready to operate. - normal downtime. - Labor, materials, utilities, etc. ARE FULLY AVAILABLE. - the number of shifts, hours of operation, and overtime pay that can be sustained under normal conditions and a realistic work schedule in the long run. - the same product mix as in the fourth quarter.	FULL PRODUCTION CAPABILITY				
		4th QTR. 2005		4th QTR. 2004		
		\$	Mil.	Thou.	Mil.	Thou.
		34				
c.	Divide your actual production estimate by your full production estimate . Multiply this ratio by 100 to get a percentage. Enter this percentage in the box.	Capacity Utilization:				
	Is this a reasonable estimate of your sustainable capacity use in the 4th quarter?	☐ Yes ☐ No – Please review your full production estimate				

- Select the facility's estimated **National Emergency Production Rate** for this chemical from the range of values provided in the drop-down box; [Q:9.5-763]



National Emergency Production is the maximum amount of production that this facility can expect to attain and sustain for one year or more during national emergency conditions. The National Emergency Production Rate is estimated by dividing the average amount of chemical or product produced over the year by the amount that could have been produced if the plant had been operating under national emergency conditions during that period. The rate of production at national emergency levels should be **greater than or equal to** the rate of full production capability. For detailed definitions and instructions for calculating the national emergency production rate, review the instructions for Item 5 on the Annual Plant Capacity Utilization Survey accessible by clicking the link above.

- Enter the **total annual production** of this chemical (in pounds/year) from this facility. [Q:9.5-764]

This information is similar to that which is reported under EPA's Inventory Update Rule (for updating the Toxic Substances Control Act Chemical Inventory Database) for those organic and inorganic substances manufactured or imported in quantities of 25,000 pounds per site per reporting year. Report production only, not imports. If the chemical is not on the TSCA Inventory, provide an estimate of your annual production. Do not use commas when entering this information.

- From the ranges provided in the drop-down box, select the **estimated replacement cost** of the production unit(s) for this chemical at this facility. [Q:9.5-765]

Replacement Cost(s) apply to the production unit(s) related to the manufacture of this chemical and any other onsite property likely to be damaged beyond repair that would need to be replaced to restore the original functionality of the unit or equipment to its design productivity levels.

The economic value to repair or replace the damaged or destroyed unit(s) and its associated equipment, plus the economic value of any lost products, should be estimated in US Dollars. For the purposes of this analysis, use the historic (undepreciated) cost of the facility property plus the undepreciated value of betterments/improvements (excluding maintenance and repair) to the production unit less the amount that is covered by insurance.

5.9 Economically Critical Chemicals

The following section of the Top-Screen relates to chemicals that are important to the national economy or to other critical sectors (aside from the ones in the Mission Critical Chemical section). In this section, the user will answer questions about chemical production that accounts for 35% or more of the domestic production to any sector irrespective of their listing in previous questions.



Production of Economically Critical Chemicals. Does this facility account for 35% or more of the domestic production of any chemical

This question excludes the production of chemicals for critical infrastructure sectors covered in the Mission Critical Chemical section above (i.e., Defense Industrial Base, Public Health and Healthcare, Energy (electric generation only), Public Drinking Water.

If this facility produces a chemical that is critical to the continued operation of other US manufacturing, including, but not limited to mining, construction, information, finance, government or service sector of the US economy (excluding the mission critical infrastructure sectors defined above), does the volume production of this chemical from this facility account for more than 35% of the total US production volume of this chemical. [Q:10.0-771] In other words, does the production of this chemical from this facility represent a market share larger than 35%? The market share is calculated as the facility's production divided by the total US production for a particular chemical in volume terms. An estimate of the total US production volume of a particular chemical in the facility's production portfolio should be available from a company's marketing department.

$$\text{Market Share} = \frac{\text{Facility Production of Chemical X (in volume terms)}}{\text{Total US Production of Chemical X (in volume term)}}$$

Choose Yes or No.

Further chemical information. If Yes and the facility accounts for 35% or more of the domestic production of any one chemical to one or more other economic sectors, additional information on each such chemical will be required. Check the **Add** button to confirm that all chemicals meeting the criteria have been entered [Q:10.1-2774]. Then, click the **Describe** button to enter the following information on each chemical. Enter the following information for each chemical:

- **Chemical name;** [Q:10.1-772]
- **CAS#** (if available); [Q:10.2-8607]
- Any **other name** by which the chemical is commonly known (for example, Trinitrophenol is also known as Picric acid); [Q:10.2-872]
- Select the appropriate range to represent the facility's **estimated domestic market share** of this chemical from the drop-down box; [Q:10.2-873]
- **Customer application of the chemical.** From the list provided, select the application(s) of this chemical by the facility's customer(s). Select Yes for all that apply. [Q:10.3-911] If there are other applications that are not listed, select Yes for "other applications" and enter a brief description of the other application(s) of this chemical by this facility's customer(s) that were not listed on the previous page; [Q:10.3-912]



- **Primary Market Sector for the chemical.** From the list provided, select the primary sector(s) for which this facility produces the chemical. Select *Yes* for all that apply. If there are other applications that are not listed, select *Yes* for “other primary sectors” [Q:10.5-9147] and on the next page enter a brief description of the other primary sector(s) not listed; [Q:10.5-915]
- Select whether there is an **exact or direct substitute(s)** available for this chemical produced to meet the needs of the facility’s customers (*Yes* or *No*). If *Yes*, select whether the exact or direct substitute is available in North America [Q:10.7-815] or overseas [Q:10.7-816];
- Select whether a **functional substitute(s)** is available. If *Yes*, select whether the functional substitute is available in North America [Q:10.7-812] or overseas [Q:10.7—813];
- Select the facility’s estimated annual average **Capacity Utilization Rate** from the range of values provided in the drop-down box. Use the instructions in the Mission Critical section to calculate this information; [Q:10.8-818]
- Select the facility’s estimated **National Emergency Production Rate** for this chemical from the range of values provided in the drop-down box. Use the instructions in the Mission Critical section to calculate this information; [Q:10.8-820]
- **Annual production rate** of mission critical chemicals. Enter the total annual production of this chemical (in pounds/year) from this facility. Do not use commas when entering the information; [Q:10.8-821]
- From the ranges provided in the drop-down box, select the **estimated replacement cost(s)** of the production unit(s) for this chemical at this facility. Use the instructions in the Mission Critical section to calculate this information. [Q:10.8-822]

6.0 Survey Completion

Preparer: After entering all of the relevant data, the system will generate a message based on the information supplied by the Preparer (“You may be regulated” or “You may not be regulated”). The Preparer is advised to both validate the information and review it for completeness and accuracy. A validation check for basic logical error is done by clicking on **Validate Report** on the menu on the left. Information that is missing or incorrectly entered will be listed and highlighted in red as in the example below. There will be a link to immediately return to the affected area(s) of the screen and fix the error or add the missing information.



CSAT Top-Screen Users Manual

WARNING: This record contains Chemical-terrorism Vulnerability Information that is controlled under 6 CFR 27.400. No part of this record may be disclosed to persons without a "need to know," as defined in 6 CFR 27.400(e), except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action.

Chemical Security Assessment Tool (CSAT)
Top Screen

Chemical-terrorism
Vulnerability Information (CVI)

General

Error!

- Who is the Operator of the facility? is missing.

[Go to this page to fix these issues](#)

Top-Screen will not find and highlight errors other than missing required data or logical errors (for example, the incorrect format for latitude/longitude or the incorrect number of digits for an EPA Identifier number). Users are advised to print a Summary Report and review all of the information for accuracy even if no validation errors appear on the Validation Report.

If no errors or omissions are found, the following screen will appear:

WARNING: This record contains Chemical-terrorism Vulnerability Information that is controlled under 6 CFR 27.400. No part of this record may be disclosed to persons without a "need to know," as defined in 6 CFR 27.400(e), except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action.

Chemical Security Assessment Tool (CSAT)
Top Screen

Chemical-terrorism
Vulnerability Information (CVI)

No errors were found.

Click Continue button to proceed with the submission process.

Continue

Chemical Security Assessment Tool (CSAT) Top Screen

WARNING: This record contains Chemical-terrorism Vulnerability Information that is controlled under 6 CFR 27.400. No part of this record may be disclosed to persons without a "need to know," as defined in 6 CFR 27.400(e), except with the written permission of the Secretary of Homeland Security. Unauthorized release may result in civil penalty or other action.

View Summary Report. Click on **View Summary Report** on the menu on the left and the Top-Screen will generate a report showing the questions and the data entered. This report can be printed using the **Print This Report** button on the top of the screen or the print function in your browser.

Click the **Next** button to complete the survey and transmit answers to DHS. [Q:15.1-457]

Transfer Answers to Submitter. Click the **Transfer to Submitter for Review** button to transmit the Top-Screen to the Submitter for review. The Preparer can also choose to have a copy of communications from DHS sent to them as well. [Q:15.2-931] A Yes will send an email notifying the Preparer that the survey has been transmitted to the Submitter



CSAT Top-Screen Users Manual

for review. The Preparer then has read-only access to the data unless the Submitter sends it back for revision (at which point the Preparer may again edit and enter data).

Finish

Submitter Copy
A copy of the completed survey will be sent to the Submitter.

Preparer Copy

Do you want copies of communications from DHS about this facility to be sent to the Preparer in addition to the Submitter?

[Q:15.2-931]

☐ Yes

☐ No

[<< Back](#) [Transfer To Submitter for Review](#)

Submitter Review: Once the Preparer has submitted the completed the Top-Screen, the Submitter will receive an email notifying them that the Top-Screen survey is ready for review. After entering the CSAT system, the facility or list of facilities the Submitter is authorized to review will be displayed. The Submitter will see their status in the process (*In Review* will be listed for completed surveys awaiting final review and submission). Click the name of the facility to review.

The Submitter may now page through the Top-Screen and view and edit the answers supplied by the Preparer. After reviewing all of the information, the **Finish Screen** will be displayed. The Submitter can now return the survey to the Preparer for modifications or proceed to the final validation.

If the Preparer and Submitter is the same individual, a completed Top-Screen may now be transmitted to DHS.

If the survey is returned to the Preparer, its status will return to *In Progress* on the initial sign in screen and the Preparer and Submitter will receive emails with instructions.

To finish the survey, click **Final Validation** and correct any errors or omissions.





CSAT Top-Screen Users Manual

The Submitter must save a copy of the completed Top-Screen for the record as specified in §27.255(b). Once the Top-Screen is transmitted to DHS, a user no longer has access to it. A submitted copy of the Top-Screen will be helpful in case the data need to be re-entered. This printed or electronic record must be protected as CVI as described in section 1.1 above and in the CVI manual. Users can create a copy of the completed Top-Screen by viewing and printing a summary report.

Click ***Transmit to DHS***.

After receiving the Top-Screen a facility will be evaluated to determine if it presents a high level of security risk. The Department will notify the facility in writing of its initial determination. If the Department's preliminary determination is that the facility is not a high risk facility the department will send a letter stating its determination. See Attachment B for an example of such a letter. If the Department's preliminary determination is that the facility is a high risk facility the department will also notify the facility's of (1) its placement in a risk-based tier pursuant to §27.220(a) and (2) the specific chemicals by security issue that need to be addressed in the Security Vulnerability Analysis. See Attachment C for an example of such a letter.

Survey Complete



List of Acronyms Used in Top-Screen Users' Manual

AHQ-Area of Highest Quantity
CAS-Chemical Abstract Service
CCPS-Center for Chemical Process Safety
CFR-Code of Federal Regulations
CW/CWP-Chemical Weapons/Chemical Weapons Precursor
CWC-Chemical Weapons Convention
CSAT-Chemical Security Assessment Tool
CVI-Chemical-terrorism Vulnerability Information
DHS-U.S. Department of Homeland Security
DOT-Department of Transportation
DUNS-Data Universal Numbering System
EPA-U.S. Environmental Protection Agency
EPCRA-Emergency Planning and Community Right-to-Know Act
FAQ-Frequently Asked Questions
IFR-Interim Final Rule
IED/IEDP-Improvised Explosive Device/Improvised Explosive Device Precursor
LNG-Liquefied Natural Gas
MTSA-Maritime Transportation Security Act
NAICS-North American Industrial Classification System
NFPA-National Fire Protection Association
NRC-Nuclear Regulatory Commission
OSHA-Occupational Safety and Health Administration
PSM-Process Safety Management
RMP-Risk Management Plan
SDWA-Safe Drinking Water Act
SBU-Sensitive but Unclassified
SSP-Site Security Plan
STQ-Screening Threshold Quantity
SVA-Security Vulnerability Assessment
TOQ-Total Onsite Quantity
TSCA-Toxic Substances Control Act
WME-Weapon of Mass Effect



Attachment A: Tools for Estimating Total Onsite Quantity and Amount in Area of Highest Quantity

Total Onsite Quantity:

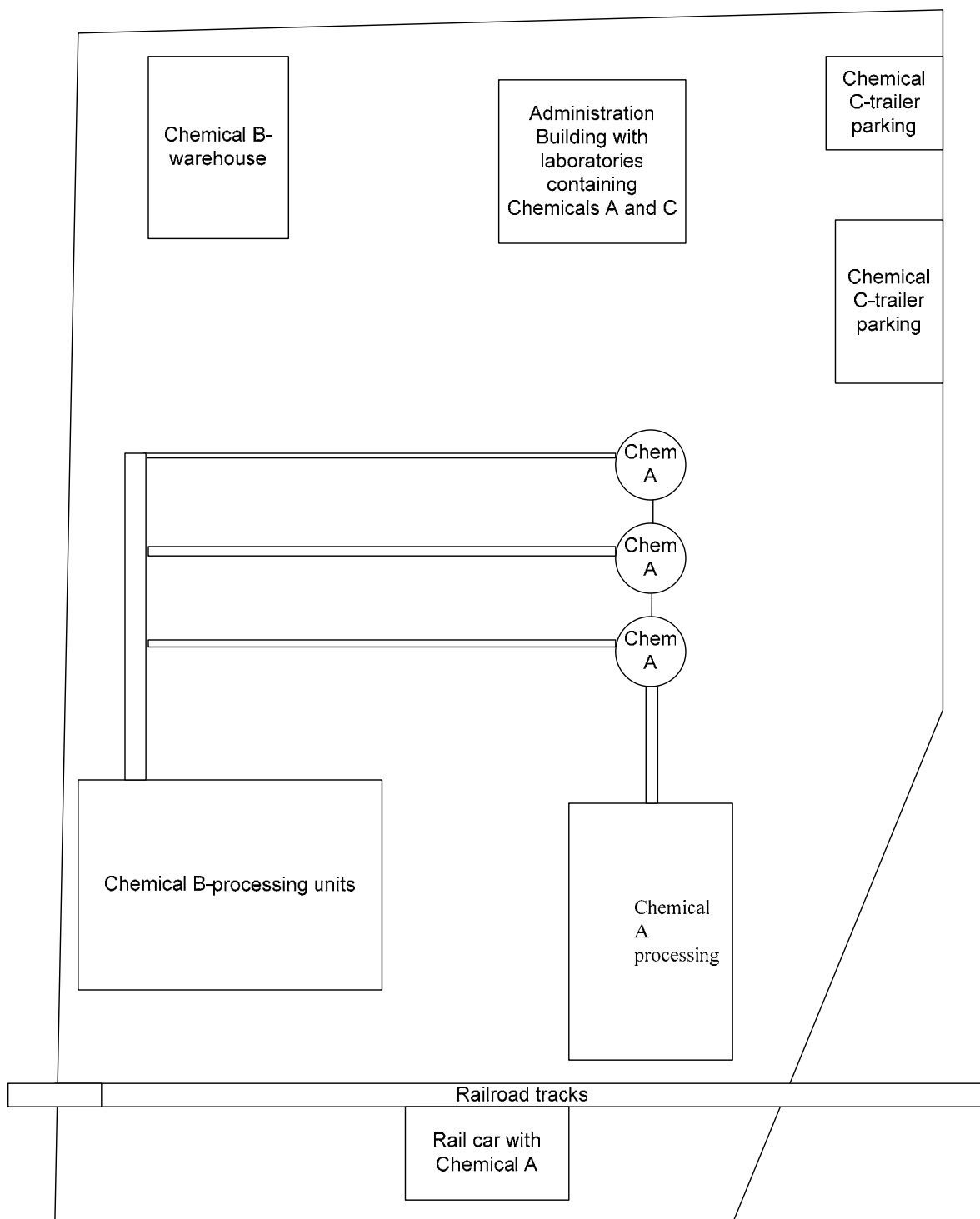
In calculating the Total Onsite Quantity (TOQ) for each chemical onsite at or above the Screening Threshold Quantity, the Preparer should aggregate all quantities of chemicals that may be found in processing areas, storage areas (vessels as well as warehouses), and railcars that are regularly on or adjacent to the facility site, laboratories, or similar locations. The Preparer should use reasonable judgment and be able to explain how the estimates were developed.

To obtain the TOQ, add up (aggregate) the maximum amount of each chemical of interest in every location within the facility over the past 12 months. In the illustration below, Chemicals A, B, and C should each be aggregated (Chemical A#1 + A#2 + A#3 etc. = aggregated sum $A1+A2+A3 = \text{Total Onsite Quantity}$) and reported even though they are not concentrated in a single location within the facility. If the laboratory in the Administration Building has quantities of Chemicals A, B, and C, these quantities should be included in the aggregated volume of each chemical to reflect the TOQ. Note that the sum that should be reported is the maximum onsite quantity at any one time over the past 12 months NOT the aggregated quantity over the past 12 months.

- Documented administrative controls that limit the maximum quantity in tanks and vessels can be accounted for in the estimate of the TOQ. If no administrative controls are in place, the total capacity of all vessels and tanks should be used.
- For calculating TOQ that includes railcars with amounts that vary, Preparers should estimate the maximum amount of the chemical that can reasonably be expected to be present.
- Do not include the amount of captive production chemicals (chemicals that the facility is making and consuming continuously within a process).
- Use reasoned judgment and maintain calculations and records used to determine the Total Onsite Quantity.



Total Onsite Quantity





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Worksheet to calculate Total Onsite Quantity and Distance of Concern

Chemical A	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)		
Storage (bulk storage tanks, vessels, underground caverns, etc.)		
Tanks		
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)		
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)		
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)		
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results		
Quantities in laboratories		
Other _____		
Total Onsite Quantity (aggregate quantity)		

Chemical B	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)		
Storage (bulk storage tanks, vessels, underground caverns, etc.)		
Tanks		
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)		
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)		
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)		
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results		
Quantities in laboratories		
Other _____		
Total Onsite Quantity (aggregate quantity)		



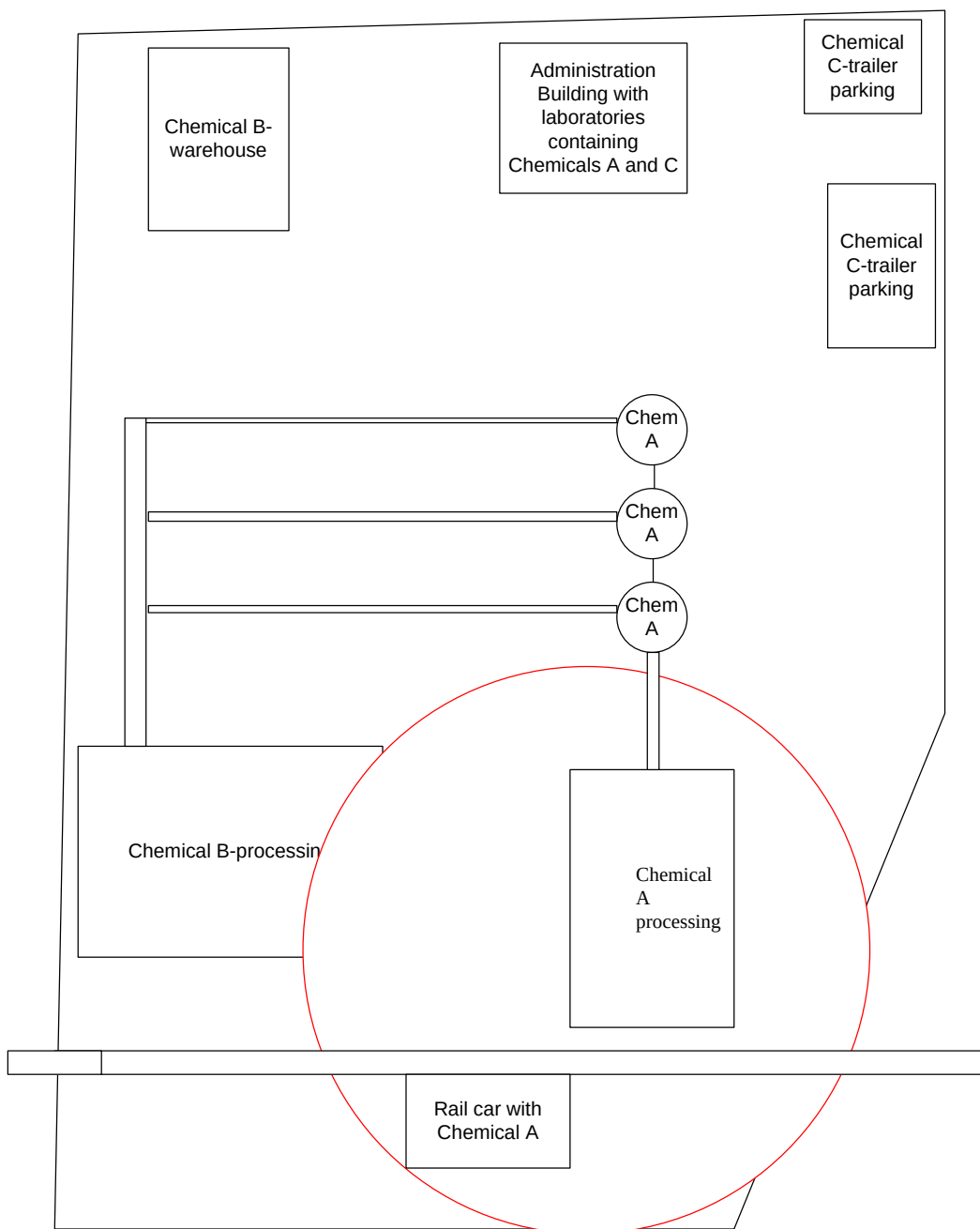
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Chemical C	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)		
Storage (bulk storage tanks, vessels, underground caverns, etc.)		
Tanks		
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)		
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)		
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)		
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results		
Quantities in laboratories		
Other _____		
Total Onsite Quantity (aggregate quantity)		



Area of Highest Quantity

The Area of Highest Quantity (AHQ) is defined as an onsite area, within a radius of 170 feet, where the greatest amount of the toxic, flammable, or explosive chemical of concern is located. For facilities with chemicals located in more than one area, the amount in the AHQ might be found in a large storage vessel or the area where most of the processing equipment is located. In the illustration below, the AHQ is represented by the circle around the process at the bottom of the diagram.





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If the entire amount of the chemical of concern is found in only one vessel or location onsite, enter the same amount as reported for Total Onsite Quantity.

The presence of a railcar at the facility may be the quantity that creates the AHQ onsite even though the railcar is not always present.

AHQ should represent the maximum concentration of the chemical onsite at any one time over the past 12 months NOT the aggregated amount over the past 12 months.



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Worksheet to Calculate Area of Highest Quantity and Distance of Concern

Chemical A	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)		
Storage (bulk storage tanks, vessels, underground caverns, etc.)		
Tanks		
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)		
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)		
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)		
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results		
Quantities in laboratories		
Other _____		
Total Onsite Quantity (aggregate quantity)		

Chemical B	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)		
Storage (bulk storage tanks, vessels, underground caverns, etc.)		
Tanks		
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)		
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)		
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)		
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results		
Quantities in laboratories		
Other _____		
Total Onsite Quantity (aggregate quantity)		



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Chemical C	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)		
Storage (bulk storage tanks, vessels, underground caverns, etc.)		
Tanks		
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)		
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)		
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)		
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results		
Quantities in laboratories		
Other _____		
Total Onsite Quantity (aggregate quantity)		



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Example Worksheet Showing Calculations for Total Onsite Quantity and Distance of Concern for three chemicals in a facility with rural topography

Chemical A: Chlorine	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)	7,500 lbs	
Storage (bulk storage tanks, vessels, underground caverns, etc.)	0	
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)	Two 90-ton rail cars=360,000 lbs	
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)	0	
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)	0	
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results	0	
Quantities in laboratories	One 100 lb cylinder	
Other _____	0	
Total Onsite Quantity (aggregate quantity)	367,6000	25 miles

Chemical B: Dimethylamine	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)	13,300 lbs	
Storage (bulk storage tanks, vessels, underground caverns, etc.)	0	
Tanks	0	
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)	0	
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)	0	
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)	0	
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results	Thirty 500 lbs totes in warehouse	
Quantities in laboratories	0	
Other _____	0	
Total Onsite Quantity (aggregate quantity)	28,300 lbs	n/a



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Chemical C: Boron Trifluoride	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)	0	
Storage (bulk storage tanks, vessels, underground caverns, etc.)	0	
Tanks	0	
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)	0	
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)	Tube trailer with eight tube containers each with 2,000 lbs=16,000 lbs	
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)	0	
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results	0	
Quantities in laboratories	Two 150 lb cylinders=300 lbs	
Other _____	0	
Total Onsite Quantity (aggregate quantity)	16,300 lbs	7.4 miles



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Example Worksheet Showing Calculations for Area of Highest Quantity and Distance of Concern for three chemicals at a facility with rural topography

Chemical A: Chlorine	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)	7500 lbs	
Storage (bulk storage tanks, vessels, underground caverns, etc.)		
Tanks		
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)	Two 90 ton rail cars=360,000 lbs	
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)		
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)		
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results		
Quantities in laboratories		
Other _____		
Total Onsite Quantity (aggregate quantity)	367,000 lbs	25 miles

Chemical B: Dimethylamine	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)	5,000 lbs	
Storage (bulk storage tanks, vessels, underground caverns, etc.)		
Tanks		
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)		
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)		
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)		
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results		
Quantities in laboratories		
Other _____		



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Total Onsite Quantity (aggregate quantity)	5,000 lbs	n/a
Chemical C: Boron Trifluoride	Amount	Distance of Concern (toxics only)
Processing units (tanks and vessels)		
Storage (bulk storage tanks, vessels, underground caverns, etc.)		
Tanks		
Railcars regularly on or adjacent to site (even if the railcar is not always present, include the estimated maximum amount at any one time that has been staged in railcars onsite over the past 12 months)		
Tube trailers parked onsite (the estimated maximum amount that has been onsite over the past 12 months)	Tube trailer with eight tube containers each with 2,000 lbs=16,000	
Other bulk transportation containers (tank cars, isotainers, large storage containers, etc.)		
Man-portable containers (cylinders, bags, etc.). Calculate the number of containers, multiply by the amount and sum the results		
Quantities in laboratories		
Other _____		
Total Onsite Quantity (aggregate quantity)	16,000 lbs	7.4 miles



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Attachment B: Example of a post Top-Screen letter for a facility that: (1) is not excluded; (2) has completed Top-Screen; (3) is found not to be a high-risk facility

Date

[Submitter Name]

[Company XYZ]

DHS Chemical Security Identification Number [INSERT Unique ID #]

[Address]

[State]

From:

Office of Infrastructure Protection / Chemical Security Compliance Division

Mail Stop 8100

Department of Homeland Security

Washington, DC 20528-8100

RE: Determination of status of [facility name from screen] [unique facility ID] under Chemical Facility Anti-Terrorism Standards

Dear [Submitter Name]:

Section 550 of Public Law 109-295 directs the Department of Homeland Security (DHS) to regulate security at chemical facilities determined to present high levels of security risk.

Based on the data submitted on [date of submission] by [name of submitter] to DHS through the Chemical Security Assessment Tool (CSAT) Top-Screen, the [name of facility from screen] has been determined not to present a high level of security risk. If there is a material change in the type of activities you undertake at this facility, this determination may change and you are required to notify DHS within 60 days of making such a change. Such notification should be sent to [insert contact information].

Thank you for your time and effort in completing the screening process. If you have any questions about the results of the CSAT Top-Screen please contact [insert contact information].



Attachment C: Example of a post Top-Screen letter with a Preliminary Tier Determination

Date

[Submitter Name]

[Company XYZ]

DHS Chemical Security Identification Number [INSERT Unique ID #]

[Address]

[State]

From:

Office of Infrastructure Protection / Chemical Security Compliance Division

Mail Stop 8100

Department of Homeland Security

Washington, DC 20528-8100

RE: Determination of preliminary tiering for [facility name from screen] [unique facility ID]

Dear [Submitter Name]:

Section 550 of Public Law 109-295 directs the Department of Homeland Security (DHS) to regulate security at chemical facilities determined to present high levels of security risk. Chemical facilities so identified are required to conduct a Security Vulnerability Assessment (SVA) and develop a Site Security Plan (SSP) to be reviewed and approved by DHS. The facility may implement layered security measures that meet the applicable Risk Based Performance Standards (RBPSs).

Based on the data submitted on [date of submission] by [name of submitter] to DHS through the Chemical Security Assessment Tool (CSAT) Top-Screen, the [name of facility from screen] has been determined to present a high level of security risk and placed preliminarily in Tier [insert tier level].

INSERT IF TIER 1, 2, OR 3: As a presumptive Tier [1, 2, 3] facility, you must conduct the Security Vulnerability Assessment using the CSAT SVA Tool available at www.dhs.gov/chemicalsecurity.

INSERT IF TIER 4: As a presumptive Tier 4 facility, DHS requests that you conduct a Security Vulnerability Assessment using the CSAT SVA Tool available at www.dhs.gov/chemicalsecurity. You may, however, submit an ASP for consideration.

The SVA for [name of facility] must include assets associated with the chemicals and security issues specified below:



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- Release of the following:
 - o [Chemical_A]
 - o [Chemical_B]
 - o [Chemical_C]
- Theft or diversion of the following:
 - o [Chemical_A]
 - o [Chemical_B]
 - o [Chemical_C]
- Sabotage or contamination of the following:
 - o [Chemical_A]
 - o [Chemical_B]
 - o [Chemical_C]
- Production of the following:
 - o [Chemical_A]
 - o [Chemical_B]
 - o [Chemical_C]

The completed CSAT SVA should be submitted to DHS by [insert tier specific date]. The Department will review the submitted SVA and notify the facility in writing of the final Tier determination. Following receipt of the final Tier Determination, the facility may be requested to prepare and submit a Site Security Plan (SSP) in accordance with the requirements of [add regulatory citation].

If you have any questions about the results of the CSAT Top-Screen or the SVA requirements please contact [insert contact information].